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JOURNALS

OF

TWO EXPEDITIONS

INTO THE

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INTERIOR OF NEW SOUTH WALES,

UNDERTAKEN BY ORDER OF THE BRITISH GOVERNMENT IN THE YEARS 1817-18.

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BY JOHN OXLEY,

SURVEYOR GENERAL OF THE TERRITORY AND LIEUTENANT OF THE ROYAL NAVY.

y-d-16

WITH

MAPS AND VIEWS OF THE INTERIOR, OR NEWLY DISCOVERED COUNTRY.

LONDON:

JOHN MURRAY, ALBEMARLE-STREET.

1820.

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LONDON:
PRINTED BY THOMAS DAVISON, WHITEFRIARS.

JOURNAL

OF AN

EXPEDITION IN AUSTRALIA.

PART I.

y. d - 16

TO

HIS EXCELLENCY

LACHLAN MACQUARIE, ESQ.

MAJOR GENERAL IN THE ARMY,

AND

CAPTAIN GENERAL AND GOVERNOR IN CHIEF IN AND OVER THE TERRITORY OF NEW SOUTH WALES AND ITS DEPENDENCIES,

THE FOLLOWING

JOURNAL OF AN EXPEDITION,

PERFORMED UNDER HIS ADMINISTRATION AND DIRECTION,

IS RESPECTFULLY INSCRIBED,

BY HIS VERY OBEDIENT HUMBLE SERVANT,

JOHN OXLEY.

INTRODUCTION.

THE colony had been established many years before any successful attempt had been made to penetrate into the interior of the country, by crossing the range of hills, known to the colonists as the Blue Mountains: these mountains were considered as the boundary of the settlements westward, the country beyond them being deemed inaccessible.

The year 1813 proving extremely dry, the grass was nearly all destroyed, and the water failed; the horned cattle suffered severely from this drought, and died in great numbers. It was at this period that three gentlemen, Lieutenant Lawson, of the Royal Veteran Company, Messrs. Blaxland, and William Wentworth, determined upon attempting a passage across these mountains, in hopes of finding a country which would afford support to their herds during this trying season.

They crossed the Nepean River at Emu Plains, and ascending the first range of mountains, were entangled among gullies and deep ravines for a considerable time, insomuch that they began to despair of ultimate success. At length they were fortunate enough to find a main dividing range, along the ridge of which they travelled, observing that it led them westward. After suffering many hardships, their distinguished perseverance was at length rewarded by the view of a country, which at first sight promised them all they could wish.

Into this Land of Promise they descended by a steep mountain, which Governor Macquarie has since named Mount York*. The valley† to which it gave them access was covered with grass, and well watered by a small stream running easterly, and which was subsequently found to fall into the Nepean River. From Mount York they proceeded westerly eight or ten miles, passing during the latter part of the way through an open country, but broken into steep hills. Seeing that the

* This mountain was found to be 795 feet in perpendicular height above the vale of Clwydd.

† Named by Governor Macquarie the Vale of Clwydd.

stream before mentioned as watering the valley ran easterly, it was evident they had not yet crossed the ranges which it was supposed would give source to waters falling westerly; they had however proceeded sufficiently far for their purpose, and ascertained that no serious obstacles existed to a farther progress westward.

Their provisions being nearly expended, they returned to Sydney, after an absence of little more than a month; and the report of their discoveries opened new prospects to the colonists, who had began to fear that their narrow and confined limits would not long afford pasture and subsistence for their greatly increasing flocks and herds.

His Excellency Governor Macquarie, with that promptitude which distinguishes his character, resolved not to let slip so favourable an opportunity of obtaining a farther knowledge of the interior. Mr. Evans, the deputy surveyor, was directed to proceed with a party, and follow up the discoveries already made. He crossed the Nepean River on the 20th of November, 1813, and on the 26th arrived at the termination of Messrs. Lawson, Blaxland, and Wentworth's journey. Proceeding westward, he crossed a mountainous* broken country, the grass of which

* Since named Clarence Hilly Range.

was good, and the valleys well-watered, until the 30th, when he came to a small stream, running westerly; this stream, called by him the Fish River, he continued to trace until the 7th of December, passing through a very fine country, adapted to every purpose either of agriculture or grazing; when he met another stream coming from the southward: this latter stream he named Campbell River, and when joined with the Fish River, the united streams received the name of the Macquarie River, in honour of his excellency the present governor of New South Wales.

Mr. Evans continued to trace the Macquarie River until December the 18th, passing over rich tracts clear of timber, well-watered, and offering every advantage which a country in its natural state can be supposed to afford. During this excursion, Mr. Evans fell in with abundance of kangaroos and emus, and the river abounded with fine fish: he saw only six natives during the whole time of his absence, viz. two women and four children, although on his return he observed many fires in the neighbourhood of the mountains. On the 8th of January, 1814, he returned to Emu Plains, having gone in the whole near one hundred miles in a direct line due west from the Nepean River.

From the report of Mr. Evans, Governor Macquarie was induced to believe that a road might be opened for the whole distance already surveyed, and was most anxious that the colony should reap as soon as possible the advantages, which the discovery of such extensive and fertile tracts seemed to open.

The ample means afforded for this purpose enabled Mr. Cox, to whose superintendence this work was entrusted, to complete a road passable for loaded carriages early in 1815. This road extended in length upwards of one hundred miles, the first fifty of which passed along a narrow ridge of the Blue Mountains, bounded on each side by deep ravines, and precipitous rocks. The road which was cut down Mount York was a work of considerable labour and magnitude, and reflected the highest credit upon all employed in it. This important task being finished, the governor resolved in person to visit a country of which so much had been said, and to judge from actual observation how far the sanguine hopes which had been entertained were likely to be realized; his excellency therefore, accompanied by Mrs. Macquarie and his suite, set out from Emu Plains on the 26th of April,

1815, and arrived on the 4th of May at a small encampment (the site of which had been previously selected), on Bathurst Plains, near the termination of Mr. Evans's journey. Governor Macquarie having been pleased to publish for the information of the colonists such observations on the country as he deemed necessary, I shall not presume to add any thing to an account, which so clearly and accurately describes all that could be interesting or beneficial to the colonist and general inquirer.

I have therefore inserted in the Appendix the account published by the Governor in the Sydney Gazette, of the 10th of June, 1815, as affording the best and most authentic information on the subject. During the Governor's stay at Bathurst, he despatched Mr. Evans, and a party with a month's provisions, to explore the country to the south-west, and it is the result of that journey which led to the expedition, the direction of which was entrusted to my command.

The means which his excellency placed at my disposal were well calculated to attain the object in view, and it is a matter of the most sincere regret, that the nature and description of the country which we passed through was

for the most part such as to afford few interesting objects of research or remark.

The botanical productions of the country have however in a great measure been ascertained by Mr. Allan Cunningham, the King's botanist, who accompanied the expedition.

With respect to the construction of the chart prefixed to this Journal, it is thought proper to observe, that the situation of the principal stations of Bathurst, and the depot on the Lachlan River, were ascertained by celestial observations, and connected by a series of triangles, commencing at the latter point, and closing at Bathurst. New base lines were frequently measured, and any unavoidable errors which might arise from the nature of the country were corrected at every proper opportunity by observed latitudes; so that on the return of the expedition to Bathurst, I had the satisfaction to find the connexion of the angles complete, the error in the whole survey not exceeding a mile of longitude.

The instruments chiefly used were a small theodolite by Ramsden, and Kater's pocket compass*, with the ad-

* A most valuable instrument, combining all the advantages of the circumferentor, without being so liable to be damaged and put out of order by carriage.

dition of an excellent sextant, pocket chronometer, and artificial horizon. I have to lament that our mountain barometers were broken at an early stage of the expedition; the height however of some principal points had been previously obtained, and is marked on the chart; these in two instances were verified by geometrical measurement, and the difference was found to be too trifling to be noticed. The conveyance of such delicate instruments is always attended with great risk, and in our case peculiarly so, our means being only those of horseback. I am afraid that a method of constructing those instruments, so as to place them beyond the reach of injury by carriage, will always remain among the desiderata of science. I have given to our thermometrical observations the form of a chart, as affording the readiest view of the atmospherical changes which took place during our journey. The winds and weather are also more particularly noticed on the same sheet than in the narrative.

It may perhaps be not superfluous to mention, that it is the intention of His Majesty's Government to follow the course of the Macquarie River, and it is sanguinely expected that the result of the contemplated expedition will be such as to leave no longer in doubt the true cha-

racter of the country comprising the interior of this vast island. It would be as presumptuous as useless to speculate on the probable termination of the Macquarie River, when a few months will (it is to be hoped) decide the long disputed point, whether Australia, with a surface nearly as extensive as Europe, is, from its geological formation, destitute of rivers, either terminating in interior seas, or having their estuaries on the coast.

J. O.

Sydney, New South Wales,
Dec. 11, 1817.

ERRATA.

Page 5, et seq. *for* bromus, *read* anthistiria.
13, et seq. *for* cupressus, *read* callitris.
15, et seq. *for* camarina, *read* casuarina.
53, et seq. *for* Mount Acton, *read* Mount Aiton.
63, line 11, *for* cassyta, *read* cassytha.
86, line 8, *for* 135, read 145.
90, line 7, *for* knaphalium, *read* gnaphalium.
98, et seq. *for* rhagodia, *read* atriplex.
119, line 7, *for* knapthalium, *read* gnaphalium.
157, et seq. *for* broom grass, *read* anthistiria.
161, line ult. *for* stirculia, *read* sterculia.
189, line 20, *for* hovia, *read* hovea.

April 9th / August 30th

JOURNAL

OF AN

EXPEDITION IN AUSTRALIA.

ON the twenty-fourth of March I received the instructions of his excellency the Governor to take charge of the expedition which had been fitted out for the purpose of ascertaining the course of the Lachlan River, and generally to prosecute the examination of the western interior of New South Wales.

On the sixth of April I quitted Sydney, and after a pleasant journey arrived at Bathurst on the fourteenth, and found that our provisions and other necessary stores were in readiness at the depot on the Lachlan River. We were detained at Bathurst by rainy unfavourable

weather until the nineteenth, when the morning proving fine, the *bât* horses, with the remainder of the provisions, baggage, and instruments, were sent off, we intending to follow them the ensuing morning.

Bathurst had assumed a very different appearance since I first visited it in the suite of his excellency the Governor in 1815. The industrious hand of man had been busy in improving the beautiful works of nature; a good substantial house for the superintendant had been erected, the government grounds fenced in, and the stack-yards showed that the abundant produce of the last harvest had amply repaid the labour bestowed on its culture. The fine healthy appearance of the flocks and herds was a convincing proof how admirably adapted these extensive downs and thinly wooded hills are for grazing, more particularly of sheep. The mind dwelt with pleasure on the idea that at no very distant period these secluded plains would be covered with flocks bearing the richest fleeces, and contribute in no small degree to the prosperity of the eastern settlements.

The soil, in the immediate neighbourhood of Bathurst, is for the first six inches of a light, black, vegetable mould,

lying on a stratum of sand, about eighteen inches deep, but of a poor description, and mixed with small stones, under which is a strong clay. The surface of the hills is covered with small gravel, the soil light and sandy, with a sub-soil of clay. The low flats on the immediate borders of the river are evidently formed by washings from the hills and valleys deposited by floods, and the overflowings of the watercourses.

Sunday, April 20.—Proceeded on our journey towards the Lachlan River. At two o'clock we arrived at the head of Queen Charlotte's Valley, passing through a fine open grazing country; the soil on the hills and in the vale a light clayey loam, occasionally intermixed with sand and gravel: the late rains had rendered the ground soft and boggy. The trees were small and stunted, and thinly scattered over the hills, which frequently closed in stony points on the valley. The rocks a coarse granite.

Monday, April 21.—Our journey for the greater part of the way lay over stony ridges, and for the last six miles over a country much wooded with ill-grown gum and stringy bark trees (all of the eucalyptus genus); the grass good, and in tolerable plenty, and much more so than the

appearance of the soil would seem to promise. At three o'clock, the horses being very much fatigued, we stopped under the point of a rocky hill for the evening.

April 22.—A clear and frosty morning. Last night was the coldest we had yet experienced, the thermometer being at six o'clock as low as 26. We felt the cold most severely, being far beyond what we had been accustomed to on the coast; the difference of temperature in twelve hours being upwards of twenty degrees of cold. Our route lay through a dull uninteresting country, thickly covered with dwarf timber, daviesia, &c. Passed under Mount Lachlan, a hill of very considerable height; a stream of water runs north-westerly under its base. Turned off a little from our track to the right, and ascended Mount Molle, whence there is a beautiful and extensive prospect from the south by the west to the north. The country (except the dividing range between the Lachlan and Macquarie Rivers, which is very lofty and irregular) rising into gentle hills, thinly timbered, with rich intervening valleys, through which flow small streams of water. I think from Mount Molle, between the points abovementioned, a distance of forty miles round

may be seen; the view to the west being lost in the blue haze of the horizon, no hills appearing in that quarter. The Mount itself is a fine rich hill, favourably situated for a commanding prospect; the valleys which surround it are excellent land, well watered with running streams. We descended its west side, and stopped for the night in the valley beneath, on the banks of a small rivulet.

April 23.—A fine clear morning. At two o'clock we arrived at Limestone Creek, passing through a beautiful picturesque country of low hills and fine valleys well watered: the timber, as usual, of diminutive growth, and unfit for any useful purpose. The ridges of the higher eminences were invariably stony, and about a mile and a half from the Creek, there is a narrow slip of barren country covered with small slate stones: the soil until then was on the sides of the hills of a fine vegetable mould, the more level and lower grounds a hazel-coloured stiff loam, both equally covered with grass, particularly the bromus. The timber standing at wide intervals, without any brush or undergrowth, gave the country a fine park-like appearance. I never saw a country better adapted for the grazing of all kinds of stock than that we passed

over this day. The limestone, which is the first that has hitherto been discovered in Australia, abounds in the valley where we halted; the sides and abrupt projections of the hills being composed entirely of it, and worn by the operation of time into a thousand whimsical shapes and forms. A small stream runs through the valley, which in June 1815 was dry; the bottom of this rivulet was covered with a variety of stones, but the bases of the hills which projected into it, and from which the earth had been washed, were of pure limestone of a bluish grey colour.

April 24.—A fine mild morning. A small piece of limestone which had been put in the fire last night was found perfectly calcined into the purest white lime. At eight o'clock proceeded on our journey, through a very uninteresting but good grazing country: nature here seemed to have assumed her tamest and most unvarying hue. The soil of the country we passed through was generally excellent, but the timber was still as useless as we had hitherto found it. We arrived about one o'clock at a small pond of water, where it was necessary to stop, as there was no other water nearer than the Lachlan River, which was distant about fourteen miles.

April 25.—Our course for the first seven or eight miles was through a level open country, the soil and grass indifferently good. We now ascended a hill a little to the left of the road, for the purpose of viewing the country through which the river ran: it appeared a perfect plain encompassed by moderately high hills, except in the south-east and west quarters, these being apparently the points whence and to which the river flows. The whole country a forest of eucalypti, with occasionally on the banks of the river a space clear of timber: there was nothing either grand or interesting in the view from this hill, neither did I see in any direction such high land as might be expected to give source to a river of magnitude. When we quitted the hill, we went west, to make the Lachlan River, passing for nearly six miles over a perfect level, the land poor, and in places scrubby. At two o'clock saw the river, which certainly did not disappoint me: it was evidently much higher than usual, running a strong stream; the banks very steep, but not so as to render the water inaccessible: the land on each side quite flat, and thinly clothed with small trees; the soil a rich light loam: higher points occasionally projected on

the river, and on those the soil was by no means so good. The largest trees were growing immediately at the water's edge on both sides, and from their position formed an arch over the river, obscuring it from observation, although it was from thirty to forty yards across. At four o'clock we arrived at the depot.

We had scarcely alighted from our horses, when natives were seen in considerable numbers on the other side of the river. I went down opposite to them, and after some little persuasion about twenty of them swam across, having their galengar or stone hatchet in one hand, which on their landing they threw at our feet, to show us that they were as much divested of arms as ourselves. After staying a short time they were presented with some kangaroo flesh, with which they re-crossed the river, and kindled their fires. They were very stout and manly, well featured, with long beards: there were a few cloaks among them made of the opossum skin, and it was evident that some of the party had been at Bathurst, from their making use of several English words, and from their readily comprehending many of our questions.

April 26.—Fine clear warm weather. The natives were

still on the opposite bank, and five of them came over to us in the course of the morning; but remained a very short time. During the last night a few fine shrimps were caught; the soldiers stationed at the depot said they had frequently taken them in considerable numbers. During the day arranged the loads for the boats and horses, that they might be enabled to set off early the next morning.

April 27.—Loaded the boats with as much of the salt provisions as they could safely carry, and despatched them to wait at the first creek about seven or eight miles down the river until the loaded horses came, and then to assist in taking their loads over the creek; intending myself to follow with the remainder of the baggage early to-morrow morning.

The observations which were made here placed the depot in lat. 33. 40. S., and in long. 148. 21. E., the variation of the needle being 7. 47. E. The barometrical observations, which had been regularly taken from Sydney to this place, did not give us an elevation of more than six hundred feet above the level of the sea; a circumstance which, considering our distance from the west coast, surprised me much.

The few words of which we were enabled to obtain the meaning from the natives who occasionally visited us, being different from those used by the natives on the east coast, it may perhaps be interesting to insert them.

Australian.	*English.*
Nh-air,	The eyebrows.
Whada,	The ears.
Ulan-gar, Nat-tang,	The head.
Anany,	The beard.
Morro,	The nose.
Er-ra,	The teeth.
Mill-a,	The eyes.
Narra,	The fingers.
Bulla-yega,	The hair of the head.
Chu-ang,	The mouth.
O-ro,	The neck.
Bargar,	The arms.
Ben-ing,	The breast.
Bur-bing,	The belly.
Mille-aar,	The loins.
Dha-na,	The thighs.
Wolm-ga,	The knees.
Dhee-nany,	The feet.
Dhu-a,	The back.
Mor-aya,	Bones worn in the cartilage of the nose.
Mada,	Skins, with which they are clothed.
Wamb-aur,	Scars, raised for ornament, or distinction, on their bodies.
Gum-iil,	Girdles worn round the body.
Un-elenar,	One night.

Australian.	*English.*
Gow,	Woman.
Mar-o-gu-la,	Another tribe.
Mem-àa,	A native man.
Wam-àa,	A kind of hornet's-nest, which they eat.
Warenur,	Fire.
Curr-eli,	Timber, or trees.
Galu-nur,	Thistles, the roots of which they eat.
Gulura,	The moon.
Yandu,	Sleep.
Galen-gar, Ori-al, Ta-wi-uth,	Stone hatchets.

The above were all the words the meaning of which we could clearly comprehend: the words used by the natives on the coast to express the same objects have not the remotest resemblance to the above.

April 28.—Fine clear mild weather. Proceeded with the remainder of the baggage to join the boats down the river; arrived at Lewis's Creek, which, although nearly dry when crossed by Mr. Evans in 1815, is now a considerable stream. The distance from the depot is about nine miles; the country on both banks of the river low but good: the upper levels would afford excellent grazing, but the soil is of inferior quality: the points of the low hills end alternately on each side the river. The land up

both banks of Lewis's Creek is very rich, and covered with herbage. The boats had come safely down the river, although the large boat grounded once; the river appears to me to be from three to five feet above its usual level.

Several specimens of crystallized quartz were found on the adjoining hills, also some small pieces of good iron ore.

April 29.—Proceeded on our journey down the river, directing the boats to stop at the creek which terminated Mr. Evans's former journey. The country through which we passed this day in every respect resembles the tracts we have already gone over. The crowns and ridges of the hills are uniformly stony and barren, ending as before alternately on each side of the river; the greater proportion of good flat land lies on the south side of the river; there are however very rich and fertile tracts on this side. After riding about eight miles, we ascended a considerable hill upon our right, from the top of which we could see to a considerable distance; between the south-west and north north-west, a very low level tract lay west of us, and no hill whatever bounded the view in that quarter.

Three remarkable hummocks bore respectively S. 72. W., S. 51½ W. and S. 34½ W., within which range of bearing the country was uniformly level, or rising into such low hills as not to be distinguished from the general surface. The tops of distant ranges could be discerned over low hills in the north-west, whilst, from north by the east to south, the country was broken into hill and valley. The whole of this extensive scene was covered with eucalypti, whilst on the rocky summits of the hills in the immediate neighbourhood a species of cupressus was eminently distinguished. From this extensive view I named the hill Mount Prospect.

At five o'clock in the afternoon we arrived at the place where the horses had been directed to wait for the boats, but they had not arrived; the distance is at least doubled by following the immediate course of the stream, but I had calculated that its rapidity would make up for the distance, and enable the boats to keep pace with the horses.

At six o'clock the boats arrived safe, the men having had a very fatiguing row, and been obliged to clear the passage of fallen trees, and other obstructions; so that

we determined to give them some repose, and halt here for the night. At half past eight o'clock proceeded down the river, intending to stop at the termination of Mr. Evans's journey in 1815, about five miles further, for the purpose of repairing the small boat, which had sustained some slight damage in coming down the river yesterday. I rode about three miles back into the country; the cupressus was here more frequent, though not of large growth; the soil is not good. In returning to the river we came upon the creek which terminated Mr. Evans's journey, down which we travelled until we came to the river, about half a mile from which is a large shallow lagoon, full of ducks, bustards, black swans, and red-bills. At twelve o'clock the horses arrived at the mouth of the creek, and the boats half an hour afterwards. The banks of the creek were very steep, and it was three o'clock before all the provisions were got over. The creek was named Byrne's Creek, after one of the present party, who had accompanied Mr. Evans in his former journey.

May 1.—The creek fell upwards of a foot during the night, by which some of the articles in the large boat received damage. Commenced the survey of the river from

this point. The flats on both sides the river were very extensive, and in general good; the same timber and grass as usual; the stream was from thirty to forty yards broad on an average. There was not even a hillock on which to ascend during this day's route, so that our view was bounded by less than a mile on each side of the river. Traces of the natives were observed, but no natives were seen. The boats were much impeded by fallen timber: it was half past two o'clock when they arrived at the place where I intended to halt, although we had only gone between nine and ten miles.

The trees on the immediate banks of the river were very large and ramified, but few of them were useful: another species of cupressus was seen to-day.

May 2.—Our journey this day was very fatiguing, the grass being nearly breast high, thick, and entangled. The soil is tolerably good within a mile and a half of the banks: I rode five or six miles out, in hopes of finding some eminence on which to ascend, but was disappointed, the country continuing a dead level, with extensive swamps, and barren brushes. The timber, dwarf box, and gum trees (all eucalypti), with a few cypresses and camarinas,

scattered here and there: few traces of the natives were seen, and none recent. Upon the swamps were numerous swans and other wild fowl. In the evening we caught nearly a hundred weight of fine fish.

May 3.—Proceeded down the river. We passed over a very barren desolate country, perfectly level, without even the slightest eminence, covered with dwarf box-trees and scrubby bushes; towards the latter part of the day a few small cypresses were seen. I think the other side of the river is much the same. We have hitherto met with no water except at the river, and a few shallow lagoons, which are evidently dry in summer. I do not know how far this level extends north and south, but I cannot estimate it at less than from ten to twelve miles on each side; but this is mere conjecture, since for the last three days I have been unable to see beyond a mile: I have, however, occasionally made excursions of five or six miles, and never perceived any difference in the elevation of the country. To-day the course of the river has been a little south of west: its windings are very frequent and sudden, fully accounting for the apparent heights of the floods, of which marks were observed about thirty-six feet above the

level of the stream. At six o'clock the boats had not arrived; and as I had given directions on no account to attempt to proceed after dark, I ceased to expect them this evening.

May 4.—As soon as it was light I sent two men up the river to search for the boat: at nine o'clock one of them returned, having found it about four miles back. It appeared that the large boat had got stoved against a tree under water, and that the people were obliged to unload and haul her on shore to undergo some repairs, which they had effected; but the rain prevented them from paying her bottom. They expected to be able to proceed in an hour or two, as the weather had begun to clear up. It was fortunate that no damage had befallen any part of the boat's lading. At twelve proceeded about three quarters of a mile down the river, and from a small eminence half a mile north of it, an extensive tract of clear country was seen, bearing N. 50. W., about two or three miles from us, having a low range of hills bounding them in the direction of S. 65. W. and N. 65. E. The river wound immediately under the hill, taking a westerly direction as far as I went, which was about three miles;

its windings were very sudden, and its width and depth much the same as before. The country, as far as I could see, was precisely similar to that already passed over: the hills were slaty and barren, with a few small cypresses: in fact, I have seen them grow on no other spots so frequently as on those stony hills. The boats arrived about two o'clock.

May 5.—Proceeded down the river, ascended the eminence mentioned yesterday, and from the top of a cypress tree a very distant view of the whole country was obtained: the opening through which the river apparently runs bore S. 75½. W.; the country to the south and south-west extremely low. A range of hills, lying nearly east and west, bounded the level tract on the other side of the river; these hills and two or three detached hammocks excepted, there was nothing to break the uniformity of the scene.

The country was in general poor, with partial tracts of better ground; the hills were slaty, and covered as well as the levels with small eucalypti, cypresses, and camarinas. About a mile from this place we fell in with a small tribe of natives, consisting of eight men;

their women we did not see. They did not appear any way alarmed at the sight of us, but came boldly up: they were covered with cloaks made of opossum skins; their faces daubed with a red and yellow pigment, with neatly worked nets bound round their hair: the front tooth in the upper row was wanting in them all: they were unarmed, having nothing with them but their stone hatchets. It appeared from their conduct that they had either seen or heard of white people before, and were anxious to depart, accompanying the motion of going with a wave of their hand.

About three miles from our last night's halting-place we had to cross a small creek, the banks of which were so steep that we were obliged to unload the horses. I rode up the creek about three quarters of a mile, and came upon those extensive plains before-mentioned; the soil of this level appears a good loamy clay, but in some places very wet: it was far too extensive to permit us to traverse much of it; we saw sufficient to judge that the whole surface was similar to that we examined; it was covered with a great variety of new plants, and its margin encircled by a new species of acacia, which received the

specific name of *pendula*, from its resembling in habit the weeping willow. Low hills to the north bounded this plain, whilst a slip of barren land, covered with small trees and shrubs, lay between it and the river.

It appeared to me that the whole of these flats are occasionally overflowed by the river, the water of which is forced up the creek before-mentioned, and which again acts as a drain on the fall of the water.

At four o'clock we halted for the evening, after a fatiguing day's journey; the boats were obliged to cut their passage three or four times, and the whole navigation was difficult and dangerous: the current ran with much rapidity, and the channel seemed rather to contract than widen. We were obliged to stop on a very barren desolate spot, with little grass for the horses; but further on the country appeared even worse. The south bank of the river (as far as I could judge) is precisely similar to that which we are travelling down. The clear levels examined to-day were named the Solway Flats. Many fish were caught here, one of which weighed upwards of thirty pounds.

May 6.—Proceeded down the river. It is impossible

to fancy a worse country than the one we were now travelling over, intersected by swamps and small lagoons in every direction; the soil a poor clay, and covered with stunted useless timber. It was excessively fatiguing to the horses which travelled along the banks of the river, as the rubus and bromus were so thickly intermingled, that they could scarcely force a passage. After proceeding about eight miles, a bold rocky mount terminated on the river, and broke the sameness which had so long wearied us: we ascended this hill, which I named Mount Amyot, and from the summit had one of the most extensive views that can be imagined. On the opposite side of the river was another hill precisely similar to Mount Amyot, leaving a passage between them for the river, and the immense tract of level country to the eastward; this hill was named Mount Stuart. Vast plains clear of timber lay on the south side of the river, and which, from our having travelled on a level with them, it was impossible for us to distinguish before. These plains I named Hamilton's Plains, and they were bounded by hills of considerable elevation to the southward; whilst the whole level country thus bounded was honoured with the designation of Princess Charlotte's Crescent.

To the west of Mount Amyot the view was equally extensive, being bounded only by the horizon; some high detached hills, rising like islands from the ocean, broke, in some measure, the sameness of the prospect. I estimated that in the west north-west I could see at least forty miles, and in the south south-west as far; the view in other points being slightly interrupted by low ranges of hills, rising occasionally to points of considerable elevation: none of those elevated spots was nearer than twenty-five or thirty miles, and considerable spaces of clear ground could, by the assistance of the telescope, be distinguished, interspersed amidst the ocean of trees whence those hills arise: a long broken mountain, bearing W. 32½. N., was named Mount Melville; one W. 24. N. Mount Cunningham; and another, bearing S. 70. W. Mount Maude. Smoke, arising from the fires of the wandering inhabitants of these desolate regions, was seen in several quarters. At four o'clock we stopped for the evening, about three miles west of Mount Amyot.

I have reason to believe that the whole of the extensive tract named Princess Charlotte's Crescent is at times drowned by the overflowing of the river; the marks of flood were observed in every direction, and the waters in

the marshes and lagoons were all traced as being derived from the river. During a course of upwards of seventy miles not a single running stream emptied itself into the river on either side; and I am forced to conclude that in common seasons this whole tract is extremely badly watered, and that it derives its principal if not only supply from the river within the bounding ranges of Princess Charlotte's Crescent. There are doubtless many small eminences which might afford a retreat from the inundations, but those which were observed by us were too trifling and distant from each other to stand out distinct from the vast level surface which the crescent presents to the view. The soil of the country we passed over was a poor and cold clay; but there are many rich levels which, could they be drained and defended from the inundations of the river, would amply repay the cultivation. These flats are certainly not adapted for cattle; the grass is too swampy, and the bushes, swamps, and lagoons, are too thickly intermingled with the better portions to render it either a safe or desirable grazing country. The timber is universally bad and small; a few large misshapen gum trees on the immediate banks of the river may be con-

OPEN PRAIRIE FROM MOUNT AMYOT.

sidered as exceptions. If however the country itself is poor, the river is rich in the most excellent fish, procurable in the utmost abundance. One man in less than an hour caught eighteen large fish, one of which was a curiosity from its immense size, and the beauty of its colours. In shape and general form it most resembled a cod, but was speckled over with brown, blue, and yellow spots, like a leopard's skin; its gills and belly a clear white, the tail and fins a dark brown. It weighed entire seventy pounds, and without the entrails sixty-six pounds: it is somewhat singular that in none of these fish is any thing found in the stomach, except occasionally a shrimp or two. The dimensions of this fish were as follow:

	Feet.	Inches.
Length from the nose to the tail . .	3	5
Circumference round the shoulders . .	2	3
Fin to fin over the back . . .	1	5
Circumference near the anus . .	1	9
Breadth of the tail	1	1½
Circumference of the mouth opened . .	1	6
Depth of the swallow . . .	1 foot.	

Most of the other fish taken this evening weighed from fifteen to thirty pounds each, and were of the same kind as the above.

May 7.—A fine clear frosty morning. The horses having been much fatigued by the two last days' journey, I determined to halt to-day instead of Saturday, as the grass was good, which is more than could be said of it for some days past. Observed the latitude to be 33. 22. 59. S.

May 8.—Proceeded down the river. Our general course was westerly, and the country, though equally level with any we had passed, improved in the quality of the soil, which, during the greater part of to-day's route, was a good vegetable mould, the land thickly covered with small acacia and dwarf trees. On the south side of the river it was apparently the same; and the whole we passed over bore evident marks of being subject to inundations.

The banks of the river were, I think, much lower, not exceeding fifteen or twenty feet high, and they were rather clearer of timber than before. The camarina, which used to line the banks, was now seldom seen, the acacia pendula seeming to take its place. We stopped for the night on a plain of good land, flooded, but clear of timber: large flocks of emus were feeding on it, and we were fortunate enough to kill a very large one after a fine chase. At

three o'clock, the boats not having arrived, I sent a man back to look for them; at eight he returned, having found them about six miles up the river, unable to proceed until morning, having met with continual interruptions from fallen trees. These impediments in the navigation of the river obstruct our progress very materially, and its windings continue so great and frequent, that the distance travelled by land is nearly trebled by water.

May 9.—The boats not having arrived at ten o'clock, Mr. Evans proceeded with the *bât* horses another stage down the river. Mr. Cunningham and I waited to bring up the boats, which shortly afterwards came in sight. We proceeded to join the horses, which we did about five o'clock, the boats having gone in that time nearly thirty-six miles, although the distance from the last station did not exceed seven in a direct line.

The country we had passed through during this day's route was extremely low, consisting of extensive plains divided by lines of small trees: the banks of the river, and the deep bights formed by the irregularity of its course, were covered with acacia bushes and dwarf trees. The river, at the spot where we stopped, wound along the edge

of an extensive low plain, being at least six miles long and three or four broad; these I called Field's Plains, after the judge of the supreme court of this territory; they are the same which we saw from the top of Mount Amyot. The soil of these plains is a light clayey loam, very wet in many places; they were fringed round with that beautiful tree, the acacia pendula, which here seems to perform the part of the willow in Europe; the cypresses were also more frequent, and the banks of the river much lower than even those we passed yesterday. I cannot help thinking that the whole of this extensive region has been at some time or other under water, and that the present river is the drain by which the waters have been conveyed to lower grounds. It is evident that even now the plains (on those parts clear of trees) are frequently under water, and that at very high floods the wooded lands are so too, for it is almost impossible to distinguish any difference in their elevation; but the wooded lands, from being actually higher, seem to have given time for the growth of the diminutive timber with which they are covered, whereas the lower plains are too frequently covered to give time for such growth.

May 10.—The horses having strayed in the night, and it being nearly noon before they were found, I determined to make this a halting day.

These plains are much more extensive than I supposed yesterday, and many new plants were found on them. The river rose upwards of a foot during the night, and still continues to rise; a circumstance which appears very singular to me, there having been no rains of any magnitude for the last five weeks, and none at all for the last ten days. We are also certain that no waters fall into it or join it easterly for nearly one hundred and fifty miles. This rise must therefore be occasioned by heavy rains in the mountains, whence the river derives its source; but it is not the less singular, that during its whole course, as far as it is hitherto known, it does not receive a single tributary stream. Observed the latitude 33. 16. 33. S.

May 11.—The river rose about four feet during the night, and still continues to rise. Set forward on our journey down the river. About four miles and a half from this morning's station, the river began to wash the immediate edge of the plain, and so continued to do all along. My astonishment was extreme at finding the banks

of the river not more than six feet from the water: it at once confirmed my supposition that the whole of this extensive country is frequently inundated; the river was here about thirty yards broad. Mount Cunningham was at this time distant about two miles, and Mount Melville four miles; the plains winding immediately under the base of each. At twelve o'clock ascended the south end of Mount Cunningham, a small branch of the river running close under it. From this elevation our view was very extensive in every direction, particularly in the west quarter. The whole country in that direction was so low, that it might not improperly be termed a swamp, the spaces which were bare of trees being more constantly under water than those where they grew. A remarkable peaked hill bearing W. 27½. N. was named * Hurd's Peak, and a lofty hummock S. 83½. W., Mount Meyrick: these were the only elevations of any consequence in the western direction. To the north, low ranges of rocky hills bounded the swamps, which on the south had a similar boundary, except that occasionally a bolder rocky projection would obtrude itself on the flat.

* After Captain Hurd, Hydrographer to the Admiralty.

On descending from the hill, we proceeded to the point where the north-west arm is separated from the main branch, but apparently to join it in water, bearing from Mount Cunningham W. 40. N.: on arriving there we found the boats and horses. The crew of the former reported, that an equally considerable branch of the river, with that down which they had come, had turned off to the south-west, about two miles below the place where we stopped last night. After directing the horses and baggage to be got over the north-west arm, I returned to examine the branch passed by the boats, and found it at least as considerable as that which we were pursuing. I am in hopes that when again joined, the width and depth of the river will be considerably increased. At half past four returned to the tents on the north-west arm. The river (from whatever cause) was still rising, and no part of the banks was more than four feet above the level of the water. I consider that the river may have from eight to ten feet more water in it than usual: its present average depth is about eighteen feet.

The soil of these extensive plains, designated Field's Plains, is for the most part extremely rich, as indeed might be expected, from the deposition of the quantities

of vegetable matter that must take place in periods of flood. The plains are in some places even lower than the ground forming the immediate bank of the river, very soft, and difficult for loaded horses to pass over. If we had been so unfortunate as to have had a rainy season, it would have been utterly impossible to have come thus far by land. The ranges of hills are unconnected, and are rocky and barren; the swamps for the most part surrounding them. Mount Cunningham is a lofty rocky hill, about a mile and a half long, composed of granite rock, but entirely surrounded by low swampy ground.

Here we were so unfortunate as to find the barometer broken, the horse which carried the instruments having thrown his load in passing the swamps: every precaution had been taken in the packing to prevent such an accident, which was the more to be regretted, as it interrupted a chain of observations by which I hoped to ascertain the height of the country with tolerable accuracy. The last observations that were made, reduced to this place, gave us an elevation of not more than five hundred feet above the sea, or about a hundred feet lower than the country at the depot.

Since the river has been swollen, the fish have eluded us, none having been caught since yesterday morning. Two black swans were however shot on the river. Our present situation is by no means enviable: in the first place, there is every chance that the river may be lost in a multitude of branches, among those marshy flats, and farther navigation thus rendered impossible; and in the second, a rise of four feet in the river would sweep us all away, since we have not the smallest eminence to retreat to. Should the river lead through to the westward, and be afterwards joined by the branches we have passed, it may become something more interesting and encouraging: a wet or even a partially rainy season will, in my judgment, preclude us from returning by our present route, more especially if these low countries continue for any distance.

I am by no means surprised at the paucity of natives that have been seen: it would be quite impossible in wet seasons to inhabit these marshes, and equally so for them to retreat in times of flood. Their fires are universally observed near the higher grounds, and no traces of any thing like a permanent camp has hitherto been seen; but

in many places on the banks quantities of pearl muscle-shells were found near the remains of fires. That large species of bittern, known on the east-coast by the local name of Native Companions, I believe from the circumstance of their being always seen in pairs, was observed, on the flats, of very large size, exceeding six feet in height: they were so shy that we were unable to shoot any.

May 12.—The fine weather still continues to favour us. The river rose in the course of the night upwards of a foot. It is a probable supposition that the natives, warned by experience of these dangerous flats, rather choose to seek a more precarious, but more safe subsistence in the mountainous and rocky ridges which are occasionally to be met with. The river and lagoons abound with fish and fowl, and it is scarcely reasonable to suppose that the natives would not avail themselves of such store of food, if the danger of procuring it did not counterbalance the advantages they might otherwise derive from such abundance.

About three quarters of a mile farther westward we had to cross another small arm of the river, running to the northward, which although now full, is, I should think,

dry when the river is at its usual level. It is probable that this and the one which we first crossed join each other a few miles farther to the westward, and then both united fall into the stream which gave them existence. We had scarcely proceeded a mile from the last branch, before it became evident that it would be impossible to advance farther in the direction in which we were travelling. The stream here overflowed both banks, and its course was lost among marshes: its channel not being distinguishable from the surrounding waters.

Observing an eminence about half a mile from the south side, we crossed over the horses and baggage at a place where the water was level with the banks, and which when within its usual channel did not exceed thirty or forty feet in width, its depth even now being only twelve feet.

We ascended the hill, and had the mortification to perceive the termination of our research, at least down this branch of the river: the whole country from the west north-west round to north was either a complete marsh or lay under water, and this for a distance of twenty-five or thirty miles, in those directions; to the south and south-

west the country appeared more elevated, but low marshy grounds lay between us and it, which rendered it impossible for us to proceed thither from our present situation. I therefore determined to return back to the place where the two branches of the principal river separated, and follow the south-west branch as far as it should be navigable; our fears were however stronger than our hopes, lest it would end in a similar manner to the one we had already traced, until it became no longer navigable for boats.

In pursuance of this intention we descended the hill, which was named Farewell Hill, from its being the termination of our journey in a north-west direction at least for the present, and proceeded up the south bank of the stream. We were able to reach only a short distance from the spot where we stopped last night, having been obliged to unload the horses no less than four times in the course of the day, added to which, the travelling loaded through those dreadful marshes had completely exhausted them: my own horse, in searching for a better track, was nearly lost, and it consumed four hours to advance scarcely half a mile.

My disappointment at the interruption of our labours

in this quarter was extreme, and what was worse, no flattering prospect appeared of our succeeding better in the examination of the south-west branch. I was however determined to see the present end of the river in all its branches, before I should finally quit it, in furtherance of the other objects of the expedition.

May 13.—Returned to the point whence the river separates into two branches; intending first to descend the south-west branch for some distance before the boats and baggage should move down, being unwilling the horses should undergo an useless fatigue in traversing such marshy ground, unless the branch should prove of sufficient magnitude to take us a considerable distance; conceiving it an object of the first importance that the horses should start fresh, if I should find it necessary to quit the river at this point of the coast.

May 14.—This branch of the river has fallen about a foot. Having directed the casks in the boats to be prepared for slinging on the horses, and the tools and arms to be put in order preparatory to leaving the river, I proceeded to examine the branch. After going about four miles down, it took a similar direction (north-westerly)

to that which we had previously traced. The banks on both sides were a mere marsh, and about six miles down, a small arm from it supplied the marshes between this and the north-west branch. The fall of the country from the south-east to the north-west was very remarkable; the water in the branch was here nearly level with the banks, and was narrowed to a width of not more than twenty feet. Finding that it would be equally as impracticable to follow this branch as the other, I returned and commenced preparations for setting out for the coast, which I purpose not to do until Sunday, in order that the horses may be refreshed, as they will at first be most heavily laden.

My present intention is to take a south-west direction for Cape Northumberland, since should any river be formed from those marshes, which is extremely probable, and fall into the sea between Spencer's Gulf and Cape Otway, this course will intersect it, and no river or stream can arise from these swamps without being discovered. The body of water now running in both the principal branches is very considerable, fully sufficient to have constituted a river of magnitude, if it had constantly maintained such a supply of water, and had not become separated into branches, and lost among the immense

marshes of this desolate and barren country, which seems here to form a vast concavity to receive them. It is impossible to arrive at any certain opinion as to what finally becomes of these waters, but I think it probable, from the appearance of the country, and its being nearly on a level with the sea, that they are partly absorbed by the soil, and the remainder lost by evaporation.

May 15.—Mr. Cunningham made an excursion under Mount Melville, and found the country in that direction as full of stagnant water as to the north-west. Some tracts rather more raised above the usual level were barren, and covered with acacia scrubs. The natives had been recently under Mount Melville, perhaps to the number of a dozen: abundance of large pearl muscle-shells was found about their deserted fire-places, but these shells had been apparently some months out of water.

May 16.—Felled a tree of the acacia pendula, the wood extremely hard and beautiful; a black resinous juice exuded from the heart, which much resembled the black part of the lignum vitæ. Our observations placed this spot in latitude 33. 15. 34. S.; longitude 147. 16. E. and the variation of the compass 7. 0. 8. E.

May 17.—After reducing our luggage as much as

possible, we sent every thing down the branch about two miles, and landed on the south shore; got every thing in readiness for proceeding on our journey to-morrow; hauled up the boats on the south bank, and secured them, together with such heavy articles as we could not take with us. The provisions occupied our whole fourteen horses, including my own, and each will still be very heavily laden.

May 18.—At nine o'clock we commenced our journey towards the coast; at three stopped within four miles of Mount Maude, on a dry creek, with occasional pools of very indifferent water. The country through which we passed from the branch was for the first three miles very low and wet, with large lagoons of water. During the latter part of the journey the country was more elevated though still level, the soil light and rotten, and overrun with the acacia pendula. The horses being very heavily laden fell repeatedly during the early part of the day. Our course was nearly south-west, and we performed about ten miles.

May 19.—At two miles passed over a low rocky range connected with Mount Maude: the remainder of our day's journey (nearly twelve miles) lay chiefly through a barren

level country, the ground rather studded than covered with grass, and that only in patches, by far the greater part producing no grass at all. The trees were chiefly cypresses, a new species of staculia, together with scrubs of the acacia pendula. The soil a light red sand, the lower levels being stronger and more clayey. We did not meet with any water, and were obliged to stop in the middle of an acacia brush, the horses being too much fatigued to proceed farther, and as the country had been lately burnt, the grass was a little better than usual. At four o'clock sent two men to search for water, and in about half an hour they returned, having found several small ponds of good water about three quarters of a mile to the south-west: the swamp appeared to extend to the northward a considerable distance. Several native huts were on the edge of one of the ponds, but they had not been recently inhabited.

May 20.—Proceeded forward south-west eleven miles through a most barren desolate country, the soil a light-red sand, literally parched up with drought, there being no appearance of rain having fallen for several months. The country through which we passed being a perfect plain

overrun with acacia scrubs, we could not see in any direction above a quarter of a mile; I therefore halted at two o'clock on purpose to gain time to find water before sun-set, as we had seen no other signs of any on our route than a few dry pits. It is impossible to imagine a more desolate region; and the uncertainty we are in, whilst traversing it, of finding water, adds to the melancholy feelings which the silence and solitude of such wastes is calculated to inspire.

The search for water was unsuccessful, about three gallons of muddy liquid being all that could be procured: our horses and dogs, I am afraid, were the greatest sufferers.

May 21.—The water was so extremely bad that, pressed as we were by thirst, we could scarcely even by twice boiling it render it drinkable. After travelling ten or eleven miles through a country equally barren and destitute with that of yesterday, without meeting with the least appearance of water, and the horses being completely worn out, I determined to halt on a small patch of burnt grass; two of the horses had fallen several times under their loads, and nothing but the evenness of the

road enabled us to reach thus far. The same level plain extended on all sides, and our view was confined to the scrubby brush around us. A small hollow lying across our track, I sent a man on horseback to trace it, in hopes it might lead to water: he returned about four o'clock with the joyful news that he had found water in a large swamp about five miles to the north-west: he also saw a native, who however ran too swiftly to allow him to come up with him. This was the first living creature of any kind we had seen since we quitted the river. Both the kangaroo and emu seem to have deserted these plains for other parts of the country better watered, and affording them more food. The horses being utterly unable to proceed without rest, I determined to remain here to-morrow to refresh them.

May 22.—The nights cold and frosty, the days warm and clear: I think it is very evident that the altitude of the country declines in a remarkable manner to the north-west; from the south-east to the south-west it appears nearly of the same elevation; and in travelling we appear to be going along an inclined plane, the lowest edges being from west to north. I went about five miles to the

north-west to the place whence the water was procured; the country poor, and as barren as can well be imagined; the soil a light red sand, acacia scrubs, small box-trees, and a few miserable cypresses.

May 23.—Our route lay through a country equally bad, if not worse, than any which we had passed the preceding days: in some places it was difficult for the horses to force a passage through the brush; occasionally low stony ridges intervened, which, when viewed from higher eminences, were not to be detected from the plain out of which they rose. The soil was alternately a steril sand and a hardened clay, without grass of any description: the country appeared to form the bottom of a dry morass, and I am convinced if the weather had not been dry for a considerable time, travelling would have been impossible. After proceeding ten miles we were obliged to stop, the horses being unable to go further. We had seen no signs of water during our route, but stopping at a stony water-course we were in hopes of finding a sufficiency to supply our wants, and on a hill at the end of it, about a quarter of a mile to the westward, water was found.

May 24.—A day of rest and preparation. The country seems to rise hereabouts and to be more broken, the ridges stony: the dwarf timber and brush very thick. In searching for the horses this morning several kangaroos and emus were seen, also the huts of a tribe of natives recently inhabited.

May 25.—The horses much refreshed, except one which is unable to carry any thing; his load was therefore obliged to be distributed among the rest, already too heavily laden. At nine o'clock set forward on our journey. At two we arrived at the base of a hill of considerable magnitude, terminating westward in an abrupt perpendicular rock from two hundred and fifty to three hundred feet high. The country we passed over was of the most miserable description; the last eight miles without a blade of grass. The acacia brushes grow generally on a hard and clayey soil evidently frequently covered with water, and I consider that these plains or brushes are swamps or morasses in wet weather, since they must receive all the water from the low ranges with which they are generally circumscribed. It is a remarkable feature in the hills of this country that their terminations are generally perpen-

dicular westward, rising from the lower grounds round from south-west to north-west very gradually; their terminating rocky bluffs are usually two or three hundred feet high. I include in these observations not only the single detached hills, but the points of the ranges. This hill was named Mount Aiton. The country having been recently burnt, some good grass was found for the horses a little to the south-west. We therefore stopped for the night, and ascended the face of the mount for the purpose of looking around: a very large brown speckled snake was killed about half way up, which, in the absence of fresh provisions, was afterwards eaten by some of the party. On arriving at the summit we had an extensive prospect in every direction; the country was most generally level, but rose occasionally into gentle eminences bounded by distant low ranges from the south south-west to the north-west. The most considerable of these ranges were named *Peel's Range*, and *Goulburn's Range:* a very lofty hill, distant at least seventy miles, was named *Mount Granard.* Interspersed through the country, bounded by those ranges, were several large tracts entirely devoid of wood; these are however, I fear, only a repetition of the acacia plains of which we had lately been but too abund-

antly favoured. From south-west by south round to north-east were some low broken hills, with some to the east south-east of greater magnitude; but their distance was so great as to appear but faintly in the horizon. Upon the whole the country appeared more open and somewhat better, particularly in the immediate vicinity of our station to the south-west. There were not the smallest signs of any stream, neither were there any fires in the direction we had to take. Three or four fires were seen in the north-west, and recent traces of the natives were discovered near our tents. The inhabitants of these wilds must be very few, and I think it impossible for more than a family to subsist together; a greater number would only starve each other: indeed their deserted fires and camps which we occasionally saw, never appeared to have been occupied by more than six or eight persons. The scarcity of food must also prevent the raising of many children, from the absolute impossibility of supporting them until of an age to provide for themselves. We have seen so few animals, either kangaroo or emu, and the country appears so little capable of maintaining these animals, that the means of the natives in procuring food must be precarious indeed. We found just a sufficiency of water

to answer our purpose in a drain from the Mount; our dogs are, however, in a wretched condition for want of food.

May 26.—The horses having strayed in the night, every man was employed in searching for them. In passing through those barren brushes yesterday, a great quantity of small iron-stones was picked up, from the size of a large pea to a hen's-egg, all nearly round, being washed into heaps by the waters, which in time of rain sweep over those flats. The front of Mount Aiton was found to decline about fifteen degrees from the perpendicular; the rocks were composed of a hard sandy free-stone. It was eight o'clock in the evening before any of the people returned, and then only two men came back with two horses, being all they were able to find: the other three men are still absent, but they had found the track of the other horses before these men left them. The two horses were discovered in the midst of a thick brush, entangled among creeping plants and unable to get further: they must have strayed in search of water, the water at this place not being sufficient for them all. The animals were all spencilled, but such is the scarcity of both water and grass, that they will wander in search of each.

The natives have been reconnoitring us: we have several times heard them, but have been unable to see them. At sun-set their fires were seen about two miles to the south-west.

May 27.—At day-light, despatched the other two men and horses to the assistance of the rest, who remained out all night.

A native was seen about half a mile from our fires: the dogs attacked him, and when called off, he ran away shouting most lustily; he was a very stout man, at least six feet high, entirely naked, with a long bushy beard: he had no arms of any kind. At two o'clock, two of the men who had been out all night returned, after an unsuccessful search, leaving three more out to pursue it in every possible direction. Water is evidently the reason of their straying, as several patches of burnt grass have been passed by them, and they would naturally return to the place where they last found it, if they could find none nearer.

At sun-set the men returned with nine of the horses, five being still missing: they were found ten miles on the road back, and near the place where they fed on the 24th.

May 28.—At daylight despatched four men on horseback to resume the search for the missing horses, taking with them two days' provisions.

May 29.—At four o'clock in the afternoon the men returned, still unsuccessful.

May 30.—At seven o'clock I proceeded to the north-east with two men, whilst Mr. Evans went to the north-west. At ten I was fortunate enough to fall in with the horses about eight miles from our camp; returned with them, and prepared every thing for setting forward to-morrow morning. In one of the brushes an emu's nest was found, containing ten eggs; our dogs also killed two small birds. Mr. Evans returned about three o'clock, having seen nothing remarkable: the country was very thick and brushy, and he was much impeded by creeping vines.

Mr. Cunningham here planted the seeds of quinces, and the stones of peach and apricot trees.

May 31.—Fine weather as usual, and at nine o'clock we set off with renewed hopes and spirits. Our first nine miles afforded excellent travelling through an open

country of very indifferent soil. The trees thin and chiefly cypress, with occasionally a large sterculia, but no water whatever: at the ninth mile we entered a very thick eucalyptus brush, overrun with creepers and prickly acacia bushes. We continued forcing our way through this desert until sunset, when, finding no hopes of getting through it before dark, we halted in the midst of it, having travelled in the whole nearly twenty miles, and for the last mile been obliged to cut our way with our tomahawks.

Both men and horses were quite knocked up, and our embarrassment was heightened by the want of water for ourselves and them, as this desert did not hold out the slightest hope of finding any. No herbage of any kind grew on this abandoned plain, being a fine red sand, which almost blinded us with its dust. It was with some little hesitation that we affixed a name to this brush; but at length nothing occurred to us more expressive of its aspect than *Euryalean*. This was the first night which we had passed absolutely without water.

June 1.—A cold frosty morning. The weather during

the night changed from very mild and pleasant to extreme cold; the thermometer varying 24. At daylight we loaded the horses and set forward to get out of this scrub, and endeavour to procure water and grass for the horses, which we were obliged to tie to bushes, to prevent them from straying. After going about two miles farther we cleared the thickest of it: but the country was only more open, and not in any degree more fertile. We proceeded on towards the south-east end of Peel's range until twelve o'clock, when, having gone nearly eleven miles, the horses were unable to proceed farther with their loads. There was nothing left for us but to unload them, and separate in every direction in search of that most precious of elements, without tasting a drop of which both men and horses had now existed nearly thirty-six hours.

Water was found in three holes in the side of Peel's range sufficient for all our necessities, and a most grateful relief it proved, particularly to the poor horses, who were nearly famished for the want of it: one of the best of our animals was so exhausted that it was with some difficulty he could be taken to the water. I wish the grass had proved equally good, but there is nothing for them but dead

wire-grass (*ira*). We saw no game, with the exception of three or four kangaroo rats: many beautiful small parrots were observed; and, barren as the scrub appeared to us, yet our botanists reaped an excellent harvest here; nothing being more true than that the most beautiful plants and shrubs flourish best where no grass or other herbage will grow.

June 2.—Fine and clear as usual, the nights cold. One of our best horses, mentioned yesterday as having fallen repeatedly under his load, was this morning extremely ill, having entirely lost the use of his hind quarters. Finding that he was quite unable to accompany us, and in fact unfit to do any more work, it was with extreme reluctance that I caused him to be shot, since it would have been no mercy to suffer him to linger in his present miserable condition. Observations were taken to ascertain our situation, and they placed us lat. 34. 8. 8. S., long. 146. 03. E., the variation of the compass being 7. 18. E.

The hills to the southward of us are curiously composed of pudding-stone in very large masses, the lower stratum being a coarse granite intermingled with pieces of quartz, and a variety of other stones.

June 3.—Set forward on our route, passing over a rugged, barren, and rocky country for about four miles and a half, when we ascended a hill upon our right which promised a view in all directions. To the southward, south-west, and even west, the country was a perfect plain, interspersed with more of those dreadful scrubs which we had passed through. In coming from Mount Acton to the south-east were some low ranges, with a level barren country between us and them; this hill was named Mount Caley, and the termination of Peel's range to the southward, a lofty rocky hill, was called Mount Brogden. On descending the hill, I had the mortification to find that one of the horses, who had hitherto performed well, now sunk under his load, and was unable to proceed farther: in short, all of them appeared so debilitated, that the utmost we could promise ourselves was their proceeding three or four miles farther in search of grass and water. Directing the man to stay by his load, we proceeded towards some burnt grass which had been seen from Mount Caley, and after going about four miles farther we stopped upon it. As the ultimate success of the expedition so entirely depended upon the capability of the

horses to perform the journey, it was judged advisable that they should have two or three days rest before we attempted to penetrate farther; and as we were now on a spot that at least afforded them a mouthful of fresh wire-grass, I determined, if water should be found, to remain here until Friday morning.

The country is so extremely impracticable, and so utterly destitute of the means of affording subsistence to either man or beast; water is so precarious, and when found is only the contents of small muddy holes, which under different circumstances would be rejected equally by horses and by men, that I much fear we shall not be able to proceed much further; but my mind is made up to persevere until the last horse fails us, keeping that course which, although inclining to the westward, will bring us out upon the coast upon a nearer line than Cape Northumberland, which I intended to steer for when we quitted the Lachlan River.

Sent back assistance to the man and horse left under Mount Caley, and at eight o'clock they returned.

After searching in every direction, no water was found, except in a small hole evidently dug by the natives under

Mount Brogden, and containing scarcely sufficient for the people.

June 4.—Weather as usual fine and clear, which is the greatest comfort we enjoy in these deserts, abandoned as they seem to be by every living creature capable of getting out of them. I was obliged to send the horses back to our former halting-place for water, a distance of near eight miles: this is terrible for the horses, who are in general extremely reduced; but two in particular cannot, I think, endure this miserable existence much longer.

At five o'clock, two men, whom I had sent to explore the country to the south-west and see if any water could be found, returned, after proceeding six or seven miles: they found it impossible to go any farther in that direction or even south, from the thick brushes that intersected their course on every side; and no water (nor in fact the least sign of any) was discovered either by them, or by those who were sent in search of it nearer to our little camp.

No other trace of inhabitants (besides the well from which we derive our supply of water) has hitherto been seen: no game of any kind, nor grass to support any, have

resulted from the various routes and observations of the different persons who were employed for that purpose during the day. I almost despair of finding any, for the country being perfectly level (some few elevated stations excepted), and the soil a deep loose red sand, the rain which falls must be immediately absorbed, and indeed it is quite impossible that water should remain on the surface of the land which we have travelled over since we have left the river.

At the period we quitted the river I considered our height above the level of the sea to be about five hundred feet, an elevation too trifling to afford a hope that any streams could rise in these regions and flow thence into the sea. In traversing these flats, the declivity, when it could be observed, was always towards the west and north-west, obliging me to believe that either the country continued a desert of sand as at present, or that its westerly inclination would cause all that part of it to consist of marshes and swamps. Since quitting the river we have not enjoyed what under any other circumstances would be called drinkable water; what was found being merely the contents of shallow mud holes, in the bottom of acacia

swamps, over which the dryness of the season alone enabled us to travel. We have uniformly been obliged to strain our water before we drank it, and its taste, from the decayed vegetable matter it contained, was sour and unpleasant.

June 5.—A clear cold frosty morning: sent the horses to the watering place: if it be any way possible to get them on, it is my intention to proceed to-morrow morning, as it is almost as much labour to them to go for water as it would be to perform a short day's journey.

From every thing I can see of the country to the south-west; it appears, upon the most mature deliberation, highly imprudent to persevere longer in that direction, as the consequences to the horses of want of water and grass might be most serious; and we are well assured that within forty miles on that point the country is the same as before passed over. In adopting a north-westerly course, it is my intention to be entirely guided by the possibility of procuring subsistence for the horses, that being the main point on which all our ulterior proceedings must hinge. It is however to be expected that as the country is certainly lower to the west and north-west than from south-east to south-west, there is a greater probability of

finding water in this latter direction. In our present perplexing situation, however, it is impossible to lay down any fixed plan, as (be it what it may) circumstances after all must guide us. Our horses are unable to go more than eight or ten miles a day, but even then they must be assured of finding food, of which, in these deserts, the chances are against the existence.

Yesterday, being the King's birthday, Mr. Cunningham planted under Mount Brogden acorns, peach and apricot-stones, and quince-seeds, with the hope rather than the expectation that they would grow and serve to commemorate the day and situation, should these desolate plains be ever again visited by civilized man, of which, however, I think there is very little probability.

Our observation placed the situation of the tent in lat. 34. 13. 33. S., long. 146. E.; the variation of the compass 8. 08. E.

June 6.—A mild pleasant morning: set forward on our journey to the westward and north-west, in hopes of finding a better country: at two o'clock halted about two miles from Peel's range, after going about eight miles through a very thick cypress scrub; the country equally bad as on

any of the foregoing days. We saw no signs of water during our route: the whole country seems burnt up with long continued drought; no traces of natives, or any game seen.

After two hours' search a small hole of water was found at the foot of the range, sufficient for the horses, and in a hole in the rocks a little clearer was procured for ourselves.

June 7.—Set forward to the north-west, the horses being a little fresher than for some days past. Halted at four o'clock, having gone ten miles through a country which, for barrenness and desolation, can I think have no equal; it was a continued scrub, and where there was timber it chiefly consisted of small cypress: we saw no water as usual, but stopped on some burnt grass near the base of a low range of stony hills west of Peel's range, from which we are distant eight or ten miles. These ranges abound with native dogs; their howlings are incessant, day as well as night: as we saw no game, their principal prey must be rats, which have almost undermined this loose sandy country.

As we had brought a small keg of water with us, we did not on this occasion suffer absolute want: we hope

that the instinct of the horses would lead them to water in the course of the night—but we were too sanguine.

Our spirits were not a little depressed by the desolation and want that seemed to reign around us: the scene was never varied, except from bad to worse. However, the scarcity of water and grass for the horses are our greatest real privations, for the temperature is mild and equable beyond what could be expected at this season, and it is this circumstance alone that enables us to proceed: the horses are too much reduced to endure rainy weather, even if the loose soil of the country would permit us to travel over it.

June 8.—During the night there was light rain. At daylight sent out in search of water, but all our efforts proved unsuccessful. Peel's range being the nearest high land, I determined to search the base of it, in hopes of finding water, since it was impossible that either men or horses could long endure this almost constant privation of the first necessary of life. I accordingly set off towards the range, but was prevented from making it by impenetrable scrubs: we then returned to the range a little to the west of the tent, whence we could see a considerable distance

to the west and north-west; it is impossible to imagine a prospect more desolate. The whole country in these directions, as far as the eye could reach, was one continued thicket of eucalyptus scrub: it was physically impossible to proceed that way, and our situation was too critical to admit of delay; it was therefore resolved to return back to our last station on the 6th under Peel's range, if for no other purpose than that of giving the horses water. I felt that by attempting to proceed westerly I should endanger the safety of every man composing the expedition, without any practical good arising from such perseverance: it was therefore deemed more prudent to keep along the base of Peel's range to its termination, having some chance of finding water in its rocky ravines; whilst there was none at all in attempting to keep the level country. It was too late to pursue this resolution this evening.

June 9.—During the night heavy rain. At eight o'clock set off on our return to our halting-place of the 6th, the horses having been now forty-eight hours without water. We had scarcely proceeded a mile when it began to rain hard, and continued to do so without intermission until

we stopped at the place where water had been previously found: it was by this time two o'clock, the horses failed, and the people were in little better condition, not having tasted any thing since the evening before. All our clothes were wet through, a circumstance which added greatly to the unpleasantness of our situation.

The true nature of the soil was fully developed by this day's rain. Being in dry weather a loose light sand without any apparent consistency, it was now discovered to have a small portion of loam mixed with it, which, without having the tenacity of clay, is sufficient to render it slimy and boggy: I am quite satisfied that two days' rain will at any time render this country impassable. The mortification and distress of mind I felt at being obliged to take a retrograde direction was heightened by seeing the horses struggling under loads far beyond their present powers, their labour rendered still more trying by the miserable country they were obliged to pass through.

June 10.—Light rain during the night, the morning fair and pleasant: upon mature deliberation it was resolved to remain here until the 13th, for the purpose of refreshing the horses. I also determined to send a de-

tachment on before us, to endeavour to find an eligible station for us to stop at, that we might proceed with more certainty.

Mr. Cunningham named those thick brushes of eucalyptus that spread in every direction around us *eucalyptus dumosa*, or the dwarf gum, as they never exceed twenty feet in height, and are generally from twelve to fifteen, spreading out into a bushy circle from their roots in such a manner that it is impossible to see farther than from one bush to the other; and these are very often united by a species of vine (cassyta), and the intermediate space covered with prickly wire-grass, rendering a passage through them equally painful and tedious.

The low ranges of hills which we quitted yesterday morning we named Disappointment Hills, from our not being able to penetrate beyond them to the north-west or west, and also from our not finding any water on them; our hopes being thus disappointed of penetrating into the interior in the direction that I intended when we quitted Mount Brogden.

June 11.—A party set forward to the northward to explore our to-morrow's route, and to endeavour to find water at some eligible station.

They returned about four o'clock, having proceeded eight or ten miles. Small holes of water were found in almost every gully. They saw several traces of the natives, but none recent: the dogs killed several kangaroo-rats, and some new species of plants were discovered.

June 12.—Fine and clear. At eight o'clock set forward on our journey along the west side of Peel's range: we proceeded to the north, inclining westerly for about ten miles; the travelling for the horses very bad, the ground being extremely soft, the description of the country the same. The trees resembled bushes more than timber, being chiefly small cypresses, which is the prevailing wood. The grass where we stopped was very bad, but the quantity and quality of the water compensated for it. No recent marks of the natives having visited this part of the range.

June 13.—Fine mild pleasant weather. Proceeded along the foot of Peel's range for about ten miles; we then inclined north-easterly, the range taking that direction, and after going about four miles farther we stopped for the evening: the country was wretchedly barren and scrubby, and to the north-west and west a continued eucalyptus dumosa scrub, extending as far as

the eye could reach from the occasional small hills which we passed in our route.

Water was found about two miles off in the range, affording a bare sufficiency for ourselves and horses.

June 14.—Fine clear weather. Proceeded on our journey northwards: the first four or five miles was over a rocky broken country, consisting of low hills, rising westerly of Peel's range. After going about six miles and a half the country became more open and less rocky; as the grass was here better than at our last night's halting-place, and the water convenient and tolerable, we resolved upon stopping, particularly as I intended resting the horses to-morrow; and I was fearful if I proceeded farther I might meet with neither, and thus be obliged to continue travelling to-morrow; an exertion which the horses were not in a condition to make. Nothing can be more irksome than the tedious days' journeys we are obliged to make through a country in which there is not the smallest variety, each day's occurrences and scenes being but a recapitulation of the former: our patience would frequently be exhausted, were we not daily re-animating ourselves with the hopes that the morrow will

bring us to a better country, and render a journey, the labour of which has hitherto been ill repaid, of some service to the colony, and of some satisfaction to the expectations which had been formed of its result.

June 15.—Observed in lat. 33. 49. 09. S., and long. 145. 54. E. Mr. Cunningham went upon Peel's range in search of plants, and found a few new ones; the country to the north appeared hilly and broken, but no scrubs, such as obstructed our progress westward, were seen. Goulburn's range had a remarkable appearance, being broken into peaks and singularly shaped hills. A solitary native was seen by one of our party, but he ran off with great precipitation on friendly signs being made to him to approach.

June 16.—It blew extremely hard during the night, and rained incessantly, as it still continues to do, with scarcely any intermission. This morning we had the misfortune to find one horse dead, the same that fell under his load on the 3d instant, and, as he had carried little or nothing since, he appeared to be recovering his strength. Independently of the continuance of heavy rain, which would certainly have prevented me from attempting to set

forward, the ground has become so hollow and soft from the rain which fell during the night, that it was the universal opinion that the horses could not travel under their loads. It cleared up towards night, with the exception of occasional heavy showers.

June 17.—Towards morning the weather became fine, with fresh winds from the north-east; at eight o'clock set forward on our journey, the ground extremely wet and soft.

We could not proceed above ten miles when we stopped, one of the horses being completely disabled from going any farther. The line of country we passed over was rocky, barren, and miserable, the level grounds being a perfect bog; to the westward, low irregular rocky ranges, with blasted and decayed cypresses on their summits, were the only objects which presented themselves to our view. There was neither grass nor water where we stopped; of course, nothing but the absolute necessity that existed to spare the horses could induce us to halt. People were sent to search the range for water, but all their endeavours proved fruitless, after wandering in every probable direction until sunset. The coldness of the air

would have prevented us from feeling much inconvenience from this privation, had it been in our power to have satisfied our hunger, but salt pork would have proved an aggravating meal without water; we therefore preferred an absolute fast to the certainty of increasing our thirst.

About sunset the wind increased to a perfect storm, accompanied by heavy showers, which prevented the horses from suffering so severely as they otherwise would.

June 18.—The weather was very tempestuous during the night: towards morning the wind somewhat abated, and left light drizzling showers. Our search after water was renewed, and so far succeeded as to procure us about a pint of rain-water each, which afforded us great relief. It did not appear that the horses had been equally successful.

Upon consultation, in our present critical situation it was resolved that Mr. Evans should proceed forward to the north north-west until he found grass and water, and as it was evident to all that the horses were utterly incapable of proceeding with their present loads to any distance, I thought it expedient to leave half our provisions behind, and proceed to the place selected by Mr.

Evans, and then to send back for the remainder: in fact, there remained no alternative; reduced as the horses were in their strength, it would have been in the highest degree imprudent to have dared the almost certainty of killing them by proceeding with their usual loads.

After going about three miles we came upon a small valley which afforded both good grass and water; the latter was rain-water collected in holes at the base of the range, which was composed of a hard granite rock. In this valley we found several holes dug by the natives, for the purpose of receiving water; in some a few quarts of muddy water were found, others were quite dry. It rained almost incessantly during the whole of this day, rendering our situation extremely unpleasant.

As if to add to our misfortunes, it was now first discovered that three of the casks, which had all along been taken for flour casks, were filled with pork; and upon a minute investigation it came out, that when, on the 1st of May, the large boat had been reported to have filled from the falling of the river without any other accident, that then, in fact, three of the upper tier of casks had been washed out of her. It was impossible, at this distance of

time, to exactly ascertain how such a serious loss could have happened and not have been discovered before, for the boatmen persisted in declaring that their cargo was then all safe; but, as so large a quantity could not possibly have been consumed by the party clandestinely without certain discovery, it appeared quite clear that the loss either happened on that day or on the 4th, when the large boat sunk from having been stove. In counting our casks up to this period, three, in every respect the same as the flour casks, with similar marks, had been reckoned in their lieu by us all, whilst the deficiency being then apparently in the pork was not suspected by any.

In this distressing dilemma nothing remained for us but to reduce our ration of flour in such a proportion as would leave us twelve weeks of that article, and as we had still plenty of pork, to issue an extra pound of it weekly. Since leaving the depot we had been so extremely guarded in the issue of provisions, to prevent the possibility of our suffering from any longer protraction of our journey than was expected, that never more than six pounds of flour had been issued to each person weekly, which now, from this accident coming to light, was reduced

to four pounds: it was, in truth, extremely fortunate that we had thus kept within the calculated ration, as otherwise our situation would have been highly alarming.

Some of our party began even now to anticipate the resources of famine, for a large native dog being killed, it was pronounced, like lord Peter's loaf, in the Tale of a Tub, to be true, good, natural mutton as any in Leadenhall-market, and eaten accordingly: for myself, I was not yet brought to the conversion of Martin and Jack.

The natives had been in this valley very recently, and I conjectured that they were then not far from us. In the afternoon, the rain still continuing, I sent back the strongest of the horses to bring up the provisions left behind. Towards eight o'clock the wind increased to a storm, so that the rain was forced through our tent in every part, and we were fairly washed out: this abated about ten o'clock, and the weather partially cleared up. Upon the whole this was the most uncomfortable day and night we had experienced since we quitted the depot.

June 19.—Fresh winds from the north-west, with thick small rain. The valley was now a complete bog, the hills closing on each side of it, and its widest part not exceeding

two hundred yards: the soil imbibes all the water almost as fast as it falls. There was one comfort in all this bad weather; we had plenty of water, and the horses tolerable grass.

Taking advantage of a fair interval, I explored to the north north-west about a mile, whence I had a tolerable view of the country between the showers: it was broken into very remarkable hills between the north-west by north and north-east; to the west it was more level, and having been burnt, the young grass gave it a more cheering aspect than any we had seen for some time. Bearings were taken to several remarkable hills for the purpose of connecting the survey.

Two swans passed over the valley to the north-west, which we considered as a sign that water lay in that direction.

June 20.—The weather broke up during the night, and the morning was fair and pleasant. However desirable it was that the horses should remain another day in this valley to recruit, yet, in the present unsettled state of the season, I was unwilling to lose an hour more than was absolutely necessary. We here left all the spare

horse-shoes, broken axes, &c. in order to lighten the burden of the horses. This little valley received the name of Peach Valley, from our having here planted the last of our fruit-stones.

At eight we proceeded to the north north-west, our course taking us over a broken barren country; the hills composed of rocks and small stones, the valleys and flats of sand. To the westward of our route the country was covered with scrubs of the eucalyptus dumosa; these scrubs we avoided, by keeping close along the base of Peel's range, where the country had been lately burnt. It is somewhat singular that those scrubs and brushes seldom if ever extend to the immediate base of the hills: the washings from them rendered the soil somewhat better for two or three hundred yards. As to water, we did not see the least signs of any during the whole day. After proceeding between nine and ten miles, we stopped for the evening on some burnt grass, which existed in sufficient quantity; but, although we procured a few gallons of water for ourselves, not all our researches could find a sufficiency for the horses.

The dogs killed a pretty large emu, which was a most

luxurious addition to our salt pork, of which alone we were all well satiated. I ascended the range behind the tent, and I never saw a more broken country, or one more barren. It appeared more open to the north north-west, to which point our course will be directed to-morrow.

June 21.—Fine mild weather: at eight o'clock set forward on our journey. The farther we proceed north-westerly, the more convinced I am that, for all the practical purposes of civilized man, the interior of this country westward of a certain meridian is uninhabitable, deprived as it is of wood, water, and grass. With respect to water, it is quite impossible that any can be retained on such a soil as the country is composed of, and no watercourses, for the same reason, can be formed; for, like a sponge, it absorbs all the rain that falls, which, judging from every appearance, cannot be much. The wandering native with his little family may find a precarious subsistence in the ruts with which the country abounds; but even he, with all the local knowledge which such a life must give him, is obliged to dig with immense labour little wells at the bottom of the hills to procure and preserve a necessary of life which is evidently not to be obtained by any other method.

We proceeded through a broken irregular country for nearly six miles, when the evident weakness of the horses made it highly imprudent to attempt to proceed farther. We therefore halted under a high rocky hill, which was named Barrow's Hill; and sent round in all directions to look for water. The goodness of Providence came to our succour when we least expected it; an ample sufficiency for the people being found near the top of the hill in the hollow of a rock.

I ascended Barrow's Hill, and from its summit had a very extensive prospect from the west north-west round to east north-east. To the north the country appeared perfectly level, though the horizon was skirted with distant hammocks, which could be but faintly distinguished. To the north-east were some native's fires; and a lofty detached mountain was named Mount Flinders: a high range to the westward was named Macquarie's Range, in honour of his excellency the Governor.

The men returned late after an unsuccessful search for water, having gone entirely round Mount Flinders. There was now nothing to be done but to drive the horses to the base of the hill under which we were encamped, and share

with them the water whence we derived our own supply: it was obliged to be handed from man to man in the cooking kettle, out of which the poor animals drank; and I was happy to find that a sufficiency would still remain to supply us until Monday morning, when we intended again to set forward.

June 22.—The morning mild, but a thick drizzling rain continued until near noon, when it cleared up. The variation of the compass was 7. 45. E.

About sunset, Mr. Cunningham returned from a botanical excursion to Mount Flinders; he had found many new plants on the west side of the mount, but nothing was seen from its summit which had not been previously observed from Barrow's Hill: Frazer, our botanical soldier, also returned from Mount Bowen, in Goulburn's Range; but was not fortunate enough to find any thing new in vegetation, as it had been lately burnt: it was, however, remarkable that the paneratium Macquarie should be found growing in great abundance at the very top; this plant never being found except near moist places, and in the vicinity of water. At the foot of Mount Bowen, Frazer fell in with a native camp, which had not been

quitted more than a day or two: among the reliques were three or four pearl muscles, such as we had observed on the river; and it is probable that these may have been the property of natives who live more immediately in that vicinity. These shells are used as knives, being ground very sharp against the rocks, and certainly for a scraper they may answer very well.

It may here be remarked, that the composition of the lofty detached hills, designated as mounts, is uniformly different from the rock composing the bases and summits of the more connected and elevated tracts, and what may more properly be termed ranges; the latter being of hard dark coloured granite, whilst the former rather resembles hard sandstone, studded with pebbles and quartz. The west side of Mount Flinders was covered with quartz, whilst the larger pieces of rock, on being broken, appeared to be an indurated sandstone.

June 23.—The watering our horses took us up so much time, that it was ten o'clock before we set forward to the northward. After proceeding about four miles, the country became much more open, extending east and west over a flat level plain, the botany of which, in every respect, re-

sembled Field's Plains; except that a new species of eucalyptus took place of the acacia pendula. A flock of large kangaroos was seen for the first time since we quitted the Lachlan; also many emus and bustards. Our dogs killed three kangaroos and two emus. The soil of these plains was a stiff tenacious clay, and had every appearance of being frequently under water: as we were now in the parallel of the spot where the river divided into branches, the altered appearance of the country induced us to hope that we should shortly fall in with some permanent water, and be relieved from the constant anxiety attendant on the precarious supply to which we had lately been enured.

After going eight miles and a quarter, we suddenly came upon the banks of the river; I call it the river, for it could certainly be no other than the Lachlan, which we had quitted nearly five weeks before. Our astonishment was extreme, since it was an incident little expected by any one. It was here extremely diminished in size, but was still nearly equal in magnitude to the south-west branch which we last quitted. The banks were about twelve or fourteen feet above the water, and it was running with a tolerably brisk stream to the westward. The banks were

so thickly covered with large eucalypti, that we did not perceive it until we were within a very few yards of it; it appeared about thirty feet broad, running over a sandy bottom. I think it extremely probable that the waters of both the main branches, after losing a very considerable portion over the low grounds in the neighbourhood of Mount Cunningham and Field's Plains, have again united and formed the present stream.

Our future course did not admit of any hesitation, and it was resolved to go down the stream as long as there was a chance of its becoming more considerable, and until our provisions should be so far expended as barely to enable us to return to Bathurst.

It is a singular phenomenon in the history of this river, that, in a course of upwards of two hundred and fifty miles, in a direct line from where Mr. Evans first discovered it, not the smallest rivulet, or, in fact, water of any description, falls into it from either the north or south; with the exception of the two small occasional streams near the depot, which flow from the north.

The country to the southward, in its soil and productions, explains pretty satisfactorily why no constant

running streams can have sources in that direction; and it may be esteemed, as to useful purposes, a desert, uninhabitable country. A small strip along the sea-coast may possibly be better, and derive water from the low hills which are known to border on it: south of the parallel of 34. S. may therefore be considered as falling under the above designation and description of country.

The plains south of the river, and lying from Goulburn's to Macquarie's range, were named Strangford Plains; and a remarkable peak south of Barrow's Hill, Dryander's Head.

We resolved to try if our old friends, the fish, still continued in the streams; in the course of a short time five fine ones were caught: this most seasonable refreshment had an excellent effect in raising our hitherto depressed spirits; and eternal Hope again visited us in the form of extensive lakes and a better country; and even when her companion Fear obtruded herself on our minds, the certainty of plenty of water, and the chance of a fresh meal, dispelled every remaining anxiety.

It was a matter of considerable curiosity and interest to us, in what direction the Macquarie River had run; it

was clear that it had not joined the present stream, for in that case it would have been much more considerable: we were within three or four miles of the latitude of Bathurst, and it was scarcely probable that it should continue for so long a course to run parallel to the Lachlan. The whole form, character, and composition of this part of the country is so extremely singular, that a conjecture on the subject is hardly hazarded before it is overturned; every thing seems to run counter to the ordinary course of nature in other countries.

June 24.—The water is about three feet above the common level, and although the banks on both sides are certainly occasionally overflowed, there is no appearance of any fresh or flood having swollen the stream for a considerable time.

At nine o'clock we set forward down the river; our course lay westerly, and by three o'clock we had gone nearly twelve miles in that direction; when we stopped for the night on the banks of the river near the termination of Macquarie's Range, the north point of which I named Mount Porteous.

Strangford's Plains lay along our course the whole

way; the river being hidden from our view by a thick border of trees. We observed several hollows and gulleys, which being connected with the river in times of flood, receive their waters from it; they were now dry; but the singularity consisted in the water being conveyed by them over the low lands instead of their being the channels by which the waters in rainy seasons might be drained off to the river. During our whole journey, we have never discovered in what manner any additional supply of water could be conveyed to it, as the back lands (with the exception of the ranges) were always lower than the immediate banks of the river itself; where we stopped, it was about thirty feet wide, and nearly choked up with fallen trees.

Whilst the horses were coming up, I set off, accompanied by Mr. Cunningham, for the purpose of ascending Mount Porteous: the view from it by no means repaid us for our trouble; the same everlasting flats met our eye in every direction westerly round nearly to north, in which quarter the horizon was occasionally studded with hills, at too great a distance to render them objects of interest to us. The immediate vicinity of the river was free from timber

or brush in various places; and these tracts have hitherto received the particular denomination of *plains*, which might with equal propriety be extended to the whole country. The bases of the hills and ranges were invariably a barren red sand, affording nourishment to a few miserable cypresses and eucalypti dumosa; between which, and filling up all the intermediate spaces, grows a variety of acacia and dwarf shrubs, rendering those parts nearly a thicket. Within one hundred yards of the bank of the river, and there alone, were seen the only timber trees we had met with in the country; if huge unshapen eucalypti, which would not afford a straight plank ten feet long, may be so denominated.

June 25.—Proceeded down the river, and at three o'clock halted for the night, having performed about eleven miles; the country barren, even to the very verge of the stream, which continues to run nearly west. We were obliged to keep at a small distance from the river, owing to large lagoons, partly full of water, which would have otherwise interrupted our course, or rather our multitude of courses; for I never saw a stream with such opposite windings, and no one reach was a quarter of a mile long,

so that it may be said to resemble a collar of SS. The opposite plains were named Butterworth Plains.

Several new plants were the result of to-day's research, among them a new species of amaryllis, upon which the botanists prided themselves much; for in this country few were supposed to be in existence.

June 26.—The morning cold and frosty. At nine o'clock we proceeded down the river, which inclined to the south of west for ten miles; when at three o'clock we stopped for the evening. We passed through a country to the full as barren as any we had yet seen. There were occasional clear spaces, but for the greater part thick cypress bushes, acacia, and other low shrubs, rendered it difficult for the horses to pass. On the plain, the acacia pendula again made a very fine appearance.

The timber on the intermediate banks of the stream became scarcer and smaller; and from the marks on the trees in the swamps, it sometimes overflows them to the depth of two feet; but they have now apparently been long dry, the little water remaining in the hollows or holes being a milky white.

The abundance of white cockatoos and crows, which

is constantly about the banks of the river, is astonishing; the other smaller birds appear to be also common to the east coast. Since we have been on the river, no recent traces of the natives have been seen; here, as higher up the river, they rather seem to shun it, and frequent the higher grounds in preference: perhaps their food is more easily procured on those grounds than on the river, particularly as they appear unacquainted with the method of taking the fish by hook and line.

As the horses were by no means in a condition to be forced, I determined to remain here to-morrow to refresh them, and set forward again on Saturday morning.

June 27.—After breakfast, I sent two men down the river to examine our route for to-morrow: one of them crossed over to the north side, to endeavour to reach some open spaces of plains which we saw from our tent. In the course of the afternoon they both returned; one, who had gone a little way inland on this side, could make no progress for extensive swamps, covered with water of the depth of from two to four feet, and abounding with black swans and wild fowl. The other man was also unable to reach the plains on the other side for water

supplied from a creek of the river, and forming an extensive and deep morass.

With these unfavourable reports before us, we determined to keep close to this bank of the river during to-morrow's journey; and if we should be prevented by its overflowing from proceeding, to return, and endeavour to round the morasses to the southward. Latitude by observation 33. 22. S., long. 135. 24. 15. E.; and the variation of the compass 7. 30. E.

June 28.—Upon farther consideration, it appeared more advisable that the horses should proceed round the south edge of the morasses rather than be obliged to return; after keeping by the river for three or four miles, which to all appearance was as far as we should be enabled to proceed in that direction. However, that there might remain no doubt as to which was the preferable route, I adhered to my determination to go down the banks of the river myself as far as I could, and return by the route which the horses were to take. Our principal object being to keep as close to the stream as possible, with reference to the ability of the horses to travel over the ground.

The horses set forward at nine o'clock, and I proceeded down the stream five or six miles, when I was obliged to return to the place from which I set out, being unable to cross a small drain that led from the swamps to the river. I could in no place deviate above fifty yards from the river without being bogged, the water lying in some places eighteen inches deep, and in holes, much deeper. I attempted several times to proceed southerly, intending to cross the track which I presumed Mr. Evans would be obliged to take, but I was unable to accomplish it. The route taken by Mr. Evans and the horses led along the edge of extensive morasses covered with water; we proceeded nine or ten miles, when the morasses almost assumed the appearance of lakes; very extensive portions of them being free from timber, and being apparently deep water. South of the edge of the morass along which we travelled, the country was a barren scrub, and in places very soft; the horses falling repeatedly during the day.

At the place where we stopped for the evening, I calculated that we were about five miles south of the river; on the edge of a very large lagoon, or lake. The country was so extremely low, that before I returned up the river

to rejoin the horses, wishing to see what the openings on the other side were, I ascended a large gum tree, which enabled me to see that the flats opposite were similar to those on the south side. Our progress, upon the whole, although we had travelled upwards of ten miles, did not exceed in a direct line five miles. The lagoons abound with water fowl, although we were not so fortunate as to obtain any; we were however amply compensated by our dogs killing a fine large emu. Various old marks of natives having visited these lakes, but none recent.

June 29.—Our course in the first instance was directed in such a manner as to compass the lagoons, which after travelling about three miles and a half to the south-west, we accomplished, and again came upon the stream; the country thence backward bore the marks of being at some periods nearly three feet under water, and was covered with small box-trees: the country from our rejoining the river, to the place at which we stopped for the evening, consisted of barren plains, extending on both sides of the stream to a considerable distance backward. The points of the bends of the river were universally wet swamps with large lagoons; the back land, though equally subject

to flood, was now dry; but the travelling was very heavy, the ground being a rotten, red, sandy loam, on which nothing grew but the usual production of marshes. I never saw a stream with so many sinuosities; in many places a quarter of a mile would cut off at least three miles by the river. The stream was in places much contracted, sand banks stretching nearly across; its medium depth was about eight feet.

There was not the smallest eminence whence a view might be obtained, the country appearing a dead level; and although on these plains we could see for some distance all round, yet there was not a rising ground in any direction. The plains on the north side of the stream were named Holdsworthy; and those on the south, Harrington. We were lucky enough to procure two fine emus.

June 30.—The first two or three miles were somewhat harder travelling than the greater part of yesterday. Immense plains extended to the westward, as far as the eye could reach. These plains were entirely barren, being evidently in times of rain altogether under water, when they doubtless form one vast lake: they extended in places

from three to six miles from the margin of the stream, which on its immediate borders was a wet bog, full of small water holes, and the surface covered with marsh plants, with a few straggling dwarf box-trees. It was only on the very edge of the bank, and in the bottoms of the bights, that any eucalypti grew; the plains were covered with nothing but knaphalium: the soil various, in some places red tenacious clay, in others a dark hazel-coloured loam, so rotten and full of holes that it was with difficulty the horses could travel over them. Although those plains were bounded only by the horizon, not a semblance of a hill appeared in the distance; we seemed indeed to have taken a long farewell of every thing like an elevation, whence the surrounding country could be observed. To the southward, bounding those plains in that direction, barren scrubs and dwarf box-trees, with numberless holes of stagnant water, too clearly proclaimed the nature of the country in that quarter. We could see through the openings of the trees on the river that plains of similar extent occupied the other side, which has all along appeared to us to be (if any thing) the lower ground. We travelled in the centre of the plains, our medium distance

from the river being from one to two miles; and although we did not go above thirteen miles, some of the horses were excessively distressed from the nature of the ground.

There was not the least appearance of natives; nor was bird or animal of any description seen during the day, except a solitary native dog. Nothing can be more melancholy and irksome than travelling over wilds, which nature seems to have condemned to perpetual loneliness and desolation. We seemed indeed the sole living creatures in those vast deserts.

The plains last travelled over were named Molle's Plains, after the late lieutenant-governor of the territory; and those on the opposite side, Baird's Plains, after the general to whom he once acted as aide-de-camp, and whose glory he shared. The naming of places was often the only pleasure within our reach; but it was some relief from the desolation of these plains and hills to throw over them the associations of names dear to friendship, or sacred to genius. In the evening three or four small fish were caught.

July 1.—Dark cloudy morning, with showers of rain. However desirous I was to proceed, I found that to do so

would greatly injure the horses. Towards noon it cleared up, permitting me to take a tolerable observation, to ascertain our situation. I consider ourselves as peculiarly fortunate in being blessed with so dry and favourable a season; since all attempts to penetrate into the country during rain, or after an inundation of the stream, must have failed. I am quite convinced that at this place, when the banks are overflowed, the waters must extend from thirty to forty miles on each side of the stream, as we are that distance from any eminence. If there had been any nearer to the north, west, or south, we must have seen it from those extensive plains on which we have travelled for the last three days; for looking eastward, we can distinctly perceive Macquarie's Range, from which we estimate ourselves to be about thirty-five miles west. The stream was sounded in various places during the day, and its greatest depth never exceeded seven feet; the bottom and sides a stiff bluish clay. Latitude observed 33. 32. 22. S., longitude 145. 5. 50. E.; variation of the compass 6. 49. E.

July 2.—At nine o'clock we again set forward down the stream; our course, as it has hitherto done, lay over

apparently interminable plains, nothing relieving the eye but a few scattered bushes, and occasionally some dwarf box-trees: the view was boundless as the ocean, neither eminence nor hillock appearing. On the edges of the stream alone, and the lagoons that occasionally branched from it, was any thing like timber to be seen. The occasional openings on the stream enabled us to perceive, that the north side was in every respect similar to the south: I was so much deceived, by the semblance of the plains on the other side to sheets of water, that I twice went down to the edge of the stream to assure myself to the contrary.

A strong current of water must frequently pass over these plains, as is evident from the traces left by the washings of shrubs, leaves, &c. The soil was a brown hazel-coloured sandy loam, very soft and boggy; in places it was more tenacious, water still remaining in many holes. By the marks on the trees it would seem that the stream occasionally overflows its banks to the depth of three or four feet; and five miles back from it small trees were seen, that had evidently stood from twelve to eighteen inches in the water. As usual we saw no recent signs of

natives having visited these parts; here and there the remains of burnt muscle-shells would denote that at certain seasons the stream is visited by them for the purpose of procuring these shell-fish: I am clearly of opinion that, in dry summers, there is no running water in the bed of the present stream, and thus it is easy for them to procure the muscles from the shallow stagnant pools which would naturally be formed at every bend of the stream. To procure any such shell-fish whilst a stream like the present is running in it, is totally impossible.

Although we did not travel above eleven miles, we were nearly seven hours in performing it. Our halting-place was within a few feet of the river, and so wet and spongy, that the water sprung even from the pressure of our feet; and this has been the case nearly ever since we made the stream, though of course we chose the driest spots. Neither hunting nor fishing were successful to-day, but as we had become from experience not over sanguine, our expectations were not much disappointed, and the aspect of the country promised nothing.

It had been remarked by all, for some days past, that a putrid sour smell seemed to proceed from the plains, and

we were at first at some loss to discover the cause of it, as there did not appear sufficient vegetable matter in a decayed state to produce such an effect. Mr. Cunningham discovered that it proceeded from decayed plants of the salsolæ, which produce the same effect as decayed sea-weed does in salt marshes; in short, all the plants found in our journey over these plains are the natural productions of low wet situations.

July 3.—So thick a fog arose during the night, that in the morning we could not see in any direction above one hundred yards; this delayed us considerably, and it was the middle of the day before we could proceed.

Our course lay over the same description of country as we had previously passed. The soil in some parts a red loamy mould; in others, a dark hazel-coloured sandy soil: this last appears to have its origin in the depositions left by floods, the former being the original or prevailing soil. The plants and shrubs the same as yesterday.

Several flocks of a new description of pigeon were seen for the first time; two were shot, and were beautiful and curious. Their heads were crowned with a black plume, their wings streaked with black, the short feathers

of a golden colour edged with white; the back of their necks a light flesh-colour, their breasts fawn-coloured, and their eyes red. A new species of cockatoo or paroquet, being between both, was also seen, with red necks and breasts, and grey backs. I mention these birds thus particularly, as they are the only ones we have yet seen which at all differ from those known on the east coast*. Our visible horizon, in every direction, being merely studded with shrubs and low bushes, gave the scene a singular marine appearance. We stopped about two miles south of the river, not being able to reach it before night-fall, the marshy ground having driven us a considerable distance round.

July 4.—During this day's course we repeatedly attempted to gain the situation where we supposed the river to take its course, but were always disappointed; immense swamps constantly barred our attempts to travel northerly; these swamps were now covered with several feet of water, which, from the marks of dwarf trees growing in them, is sometimes three or four feet deeper. The same dead level of country still prevailed; and the sandy deserts of

* See the Plates.

Arabia could not boast a clearer horizon, the low acacia bushes not in any degree interrupting the view. It was remarkable that there was always water where the dwarf box-trees grew; we might therefore be said to coast along from woody point to point, since all attempts to pass through them were uniformly defeated. The soil the same as yesterday, and most unpleasant to travel over, from the circular pools or hollows, which covered the whole plain, and which seem to be formed by whirlpools of water, having a deep hole in the bottom, through which the water appeared to have gradually drained off. It is clear that the entire country is at times inundated, and that as every thing now bears the appearance of long-continued drought, the swamps and stagnant waters are the residuum.

In the whole we proceeded upwards of fourteen miles, and stopped for the night upon the edge of one of the swamps, which are now the only places that afford any timber for firing. Some traces of natives were seen to-day, about three or four days old; they appeared to have been a single family of four or five persons. If there are any natives in our neighbourhood, they must have dis-

covered us, and keep out of the way, otherwise upon these clear flats we could not avoid seeing them.

We were again fortunate enough to kill an emu, a most acceptable supply, since continued exercise gives us appetites something beyond what our ration can satisfy.

July 5.—Independently of the nature of the country rendering it altogether uninhabitable, the noxious vapours that must naturally arise during the heats of summer from these marshes (should the present surface of land on which we are now travelling be then free from water), would render the whole tract peculiarly unhealthy. Even during the short space of a fortnight, when it might be presumed that the winter's cold had in a great degree rendered the effluvia innoxious, every person in the expedition was more or less affected by dysenterical complaints; and the putrid sour smell that constantly attended us was symptomatic of what would be its effects when rendered active by the powerful heats of summer.

Although there was no grass out of the marshes for the horses to feed upon, yet they appeared to live very tolerably upon a species of rhagodin which covered the plains, and being extremely succulent was eaten with

avidity by them; they certainly preferred it to the grasses which the swamps produced.

Our route lay over the same unvarying plain surface as on the preceding days, and after travelling about five miles, we again saw the line of trees growing on the banks of the stream; and having performed about ten miles more, we halted on the immediate banks of it. These were considerably lower, being about six feet above the water; the current was almost imperceptible, and the depth did not exceed four feet, and was extremely muddy; the trees growing on the banks were neither so large nor so numerous as before, and a new species of eucalyptus prevailed over the old blue gum. The north-east side was precisely of the same description of country as the south-east. A very large sheet of water or lake lay on the north-west side, opposite to the place where we made the river. The horizon was clear and distinct round the whole circle, the line of trees on the river alone excepted. From the marks on these trees, the waters appear to rise about three feet above the level of the bank; a height more than sufficient to inundate the whole country. This stream is certainly in the summer season, or in the long absence of rain,

nothing more than a mere chain of ponds, serving as a channel to convey the waters from the eastward over this low tract. It is certain that no waters join this river from its source to this point; and passing, as it does, for the most part, through a line of country so low as to be frequently overflowed, and to an extent north and south perfectly unknown, but certainly at this place exceeding forty miles, it must cause the country to remain for ever uninhabitable, and useless for all the purposes of civilized man.

These considerations, added to the state of our provisions, of which, at the reduced ration of three pounds of flour per man per week, we had but ten weeks remaining, determined me to proceed no farther westward with the main part of the expedition; but as the state of the greater part of our horses was such as absolutely to require some days' rest and refreshment, before we attempted to return eastward, I considered that it would be acting best up to the spirit of my instructions to proceed forward myself with three men and horses, and as we should carry nothing with us but our provisions, we should be enabled to proceed with so much expedition, as to go

as far and see as much in three days as would take the whole party at least seven to perform.

My object in thus proceeding farther was to get so far to the westward as to place beyond all question the impossibility of a river falling into the sea between Cape Otway and Cape Bernouilli. In my opinion, the very nature of the country altogether precludes such a possibility, but I think my proceeding so far will be conclusive with those who have most strongly imbibed the conviction that a river enters the sea between the Capes in question, which was certainly an idea I also had entertained, and which nothing but the survey of a country, without either hills or permanent streams, could have destroyed.

I must observe as a remarkable feature in this singular country, that for the last fifty miles we have not seen a stone or pebble of any kind, save two, and they were taken out of the maws of two emus. I am now firmly persuaded that there are no eminent grounds in this part of the country, until these low sandy hills* which bound the south-western coast-line are reached; and these, in my

* From Encounter Bay to this slight projection (Cape Bernouilli), the coast is little else than a bank of sand, with a few hummocks on the top, partially covered with small vegetation, nor could any thing in the interior country be distinguished above the bank. Flinder's Voy. Vol. I. p. 197.

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judgment, are the only barriers which prevent the ocean from extending its empire over a country which was probably once under its dominion.

July 6.—A fine and pleasant morning; one of the horses was found dead, the greater part of the others in a very weakly state.

July 7.—At eight o'clock, taking with me three men, I proceeded to follow the course of the stream; I attempted in the first instance to keep away from the banks, but was soon obliged to join them, as the morasses extended outwards and intersected my proposed course in almost every direction. About three miles and a half from the tent, a large arm extended from the north bank to a considerable distance on that side; the banks continually getting lower, and before we had gone six miles it was evident that the channel of the stream was only the bed of a lagoon, the current now being imperceptible, with small gum trees growing in the middle. Three miles farther the morasses closed upon us, and rendered all farther progress impossible. The water was here stagnant. The large trees that used to be met with in such numbers up the stream were entirely lost, a few diminutive gums being the only timber to be seen: the height of the bank from

the water-line was three feet six inches; and the marks of floods on the trunks of the trees rose to the height of four feet six inches, being about one foot above the level of the surrounding marshes. It would appear that the water is frequently stationary at that height for a considerable time, as long moss and other marks of stagnant waters were remaining on the trunks and roots of the trees, and on the long-leaved acacia, which was here a strong plant. There could not be above three feet water in this part of the lagoon, as small bushes and tufts of tea grass were perceptible. The water was extremely muddy, and the odour arising from the banks and marshes was offensive in the extreme. There were only four different kinds of plants at this terminating point of our journey, viz. the small eucalyptus, the long-leaved acacia, the large tea grass, and a new diæceous plant which covered the marshes, named polygonum junceum. It is possible that the bed of the lagoon might extend eight or ten miles farther, but I do not think it did, as the horizon was perfectly clear in all directions, a few bushes and acacia trees, marking the course of the lagoon, excepted.

Had there been any hill or even small eminence within

thirty or forty miles of me they must now have been discovered, but there was not the least appearance of any such, and it was with infinite regret and pain that I was forced to come to the conclusion, that the interior of this vast country is a marsh and uninhabitable. How near these marshes may approach the south-western coast, I know not; but I do not think that the range of high and dry land in that quarter extends back north-easterly for any great distance; it being known, that the coast from Cape Bernouilli to the head of Spencer's Gulf is sandy and destitute of water *.

Perhaps there is no river, the history of which is known, that presents so remarkable a termination as the present: its course in a straight line from its source to its termination exceeds five hundred miles, and including its windings, it may fairly be calculated to run at least twelve hundred miles; during all which passage, through such a

* The view from the top of Mount Brown (in lat. 32. 30. 15. S. and lon. 138. 0. ¼. E. head of Spencer's Gulf) was very extensive, its elevation not being less than three thousand feet; but neither rivers nor lakes could be perceived, nor any thing of the sea to the south-eastward. In almost every direction the eye traversed over an uninterruptedly flat woody country, the sole exceptions being the ridge of mountains, extending north and south, and the water of the gulf to the south-westward. Flinder's Voy. Vol. I. p. 159.

vast extent of country, it does not receive a single stream in addition to what it derives from its sources in the eastern mountains.

I think it a probable conjecture that this river is the channel by which all the waters rising in those ranges of hills to the westward of Port Jackson, known by the name of the Blue Mountains, and which do not fall into the sea on the east coast, are conveyed to these immense inland marshes; its sinuous course causing it to overflow its banks on a much higher level than the present, and in consequence, forming those low wet levels which are in the very neighbourhood of the government depot. Its length of course is, in my opinion, the principal cause of our finding any thing like a stream for the last one hundred miles, as the immense body of water which must undoubtedly be at times collected in such a river must find a vent somewhere, but being spent during so long a course without any accession, the only wonder is, that even those waters should cause a current at so great a distance from their source; every thing however indicates, as before often observed, that in dry seasons the channel

of the river is empty, or forms only a chain of ponds. It appears to have been a considerable length of time since the banks were overflowed, certainly not for the last year; and I think it probable they are not often so: the quantity of water must indeed be immense, and of long accumulation, in the upper marshes, before the whole of this vast country can be under water.

My intention to penetrate farther westward being thus frustrated, I returned to the tent about three o'clock, and determined, should the horses appear sufficiently recovered and refreshed, finally to quit this western part of the country on Thursday next; a few days rain would prevent us from ever quitting it, but we have been bountifully favoured by Providence with a season of continued fair and pleasant weather, which could hardly have been expected, and which alone could have enabled us to decide so satisfactorily, if it can be called satisfaction to prove the negative of the existence of any navigable rivers in this part of Australia.

July 8.—Observed the sun's magnetic amplitude in rising from the clear horizon of the plain, a circumstance

that rarely can occur in any country unless such a one as the present; it strongly marks the horizontal level which seems to run now from east to west.

Mean lat. of our tent . .	33°	53′	19″ S.
Comp. long.	144	33	50 E.
Mean variation	7	25	00 E.

Situation of the spot where the stream ceased to have a current.

Lat.	33°	57′	30″ S.
Long. comp.	144	23	00 E.
Do. do.	144	31	15 E.

No hill or eminence in a south-west direction terminating in lat. 34. 22. 12. and in long. 143. 30. 00. E. which is the calculated extent of our visible clear horizon.

The afternoon proved cloudy, with occasional showers: prepared every thing for our return eastward on the morrow.

July 9.—The morning fair and pleasant, but cold, the ground being covered with hoar-frost. At half-past eight we set out on our return eastward, every one feeling no little pleasure at quitting a region which had presented nothing to his exertions but disappointment and desolation.

Under a tree near the tent, inscribed with the words "Dig under," we buried a bottle, containing a paper bearing the date of our arrival and departure, with our purposed course, and the names of each individual that composed the party. I cannot flatter myself with the belief, however, that European eyes will ever trace the characters either on the tree or the paper; but we deposited the scroll as a memorial that the spot had been once in the tide of time visited by civilized man, and that should Providence forbid our safe return to Bathurst, the friends who might search for us should at least know the course we had taken.

About two o'clock we arrived at our halting-place of the 4th; and there being no place convenient for pitching our tent within six or seven miles farther on, we determined to remain here.

July 10.—Observed the variation of the compass by amp., at sun-rising, to be 7. 47. E., by Kater's compass. The horses having strayed, it was nearly eleven o'clock before we could set out, and between four and five o'clock we stopped at our halting-place of the 3d. On our way we passed a raised mound of earth which had somewhat the appearance of a burial-place; we opened it, but found

nothing in it except a few ashes; but whether from bones or wood could not be distinguished; a semicircular trench was dug round one side of it, as if for seats for persons in attendance.

July 11.—At nine, again set forward on our return up the river, and it was near four o'clock before we arrived at a convenient halting-place on its banks; the river presented a most singular phenomenon to our astonished view. That river which yesterday was so shallow that it could be walked across, and whose stream was scarcely perceptible, was now rolling along its agitated and muddy waters nearly on a level with the banks: whence this sudden rise, we could not divine, any more than we could account for the non-appearance of a fresh twenty miles lower down; unless the marshes which we have traced for the two last days, at a distance from the river, should have absorbed the waters in passing, or unless the extremely winding course should so protract and retard the current of them as to cause a considerable time to elapse before a flood in the upper parts could reach the lower. We considered ourselves as extremely fortunate in having quitted our station of the 8th a day or two before it was

originally intended, as we should otherwise have been in considerable danger.

The present height of the bank above the level of the stream is four feet nine inches.

A singular instance of affection in one of the brute creation was this day witnessed. About a week ago we killed a native dog, and threw his body on a small bush: in returning past the same spot to-day, we found the body removed three or four yards from the bush, and the female in a dying state lying close beside it; she had apparently been there from the day the dog was killed, being so weakened and emaciated as to be unable to move on our approach. It was deemed mercy to despatch her.

A tomb similar in form to that which we observed yesterday being discovered near our halting-place of this day, I caused it to be opened: it was a conical mound of earth about four feet high in the centre, and nearly eight feet long in the longest part, exactly in the centre, and deep in the ground: we at first thought we perceived the remains of a human body, which had been originally placed upon sticks arranged transversely, but now nearly decayed by time; nothing remained of what we took for the

body but a quantity of unctuous clayey matter. The whole had the appearance of being not recent, the semi-circular seats being now nearly level with the rest of the ground, and the tomb itself overgrown with weeds. The river fell about three inches in the course of the night.

July 12.—It is impossible that any weather can be finer than that which we are favoured with. For days together the sky is unobscured by even a single cloud, and although the air is cold and sharp, yet the dryness of the atmosphere amply repays us for any little inconvenience we sustain from the cold. At nine, we again set forward on our return up the river, and at three arrived on its banks, having performed about twelve miles. The river had fallen about one foot in the course of the day. The horses being much fatigued by the heavy travelling over the flats, and many of them being very sorely galled in the back, I propose halting to-morrow to refresh them. We were this day once more cheered by the sight of rising ground; Macquarie's Range just appearing above the horizon, distance about forty miles; and we felt that we were again about to tread on secure and healthy land, with

a chance of procuring some sort of game, which would now be very acceptable, our diet being entirely confined to pork and our morsel of bread. The weather is far too cold for us to have any hopes of procuring fish; all our attempts to catch them for the last fortnight being unsuccessful. The odour from the river and marshes was most fetid, and was, I think, even stronger than that which we had before experienced.

July 13.—In the course of the day the river fell upwards of a foot.

July 14.—The river fell about eighteen inches. We found that the horses had again strayed, and they were not found and brought home until past sunset, having wandered about in search of food from eight to twelve miles in various directions. As the people had of course separated in the search, three men still remained out; and being fearful that the darkness of the night might prevent them from finding the camp, fired several musquets, and kindled a fire upon the plains. It was twelve o'clock before they were fortunate enough to regain the tents.

July 15.—At three, having travelled about twelve

miles, halted on the stream for the evening. The dogs killed an emu.

July 16.—Cloudy, but mild and pleasant. We retraced this day much of the same ground which we travelled on the 28th ult. The horses were frequently up to their shoulders in deep holes, to the danger of breaking their own limbs, or those of their leaders or riders. There is a uniformity in the barren desolateness of this country, which wearies one more than I am able to express. One tree, one soil, one water, and one description of bird, fish, or animal, prevails alike for ten miles, and for one hundred. A variety of wretchedness is at all times preferable to one unvarying cause of pain or distress.

We halted on the margin of one of the swamps, after travelling about eleven miles, which it took eight hours to accomplish.

July 17.—Part of the horses again strayed; these delays in such a country try our patience to the very utmost, and their very rambling is the sole means of their being kept alive. It was past eleven before we could set out, and the rain that had fallen during the

night rendered our track so extremely soft that it was with difficulty the horses could proceed. At three we halted for the evening on a large lagoon near the river, having gone about nine miles and a quarter.

July 18.—At nine proceeded onwards towards Macquarie's Range; and at four, we halted at the place we rested at on the 24th ult. For the first time since we left Cypress Hill, we heard natives on the other side of the river, but they kept out of our sight.

July 19.—At nine we proceeded up the river, and at three arrived at the spot where we first reached the river on the 23d ult. The fresh in the river was still considerable, being from three to five feet above its apparent usual level.

July 20.—Rested the horses to-day, having had a hard week's work, and the weather being unfavourable. Confirmed my intention of returning to Bathurst instead of the depot on the Lachlan, for the following reasons. The route up the Lachlan would be difficult and very tedious, not to say impracticable, without the assistance of boats in crossing the two principal creeks; and if it should have proved wet and rainy, it would be nearly impossible to

travel over the low-lands with loaded horses. Again, our return by the route outward would not afford us any additional knowledge of the country, and presuming this river to be the Lachlan, the course and the country in the neighbourhood of the Macquarie would still remain unknown. To return to Bathurst by a northerly course would enable us to trace the Macquarie to a very considerable distance; it would give us a knowledge of the country at least two hundred miles below Bathurst; and although the difficulties we may meet with in the attempt are of course unknown to us, yet I consider it a far preferable route to returning by the Lachlan, the difficulties of which are known, and I think we may reach one station as soon as the other.

To-morrow, therefore, I am resolved to set forward again up the stream, and take the earliest opportunity to cross it; when, should the inclination of its course be such as to give reason to believe it to be the Macquarie, we shall continue on the north bank the whole way to Bathurst: but, on the contrary, should its course leave it no longer in doubt that it is the Lachlan again rising from the marshes under Mount Cunningham, we shall

quit its banks, and, taking a north-easterly course, endeavour to fall in with the Macquarie, which having found, I shall pursue my first intention of keeping along its banks until we arrive at Bathurst. The river has risen in the course of the night and morning about eighteen inches. We killed this day a red kangaroo, and three emus.

July 21.—The stream has risen nearly eighteen inches in the night. It is extremely puzzling whence such a body of water can come thus suddenly. There must have been a great deal of rain in the eastern mountains, and the accumulated waters can be only now bending their way to the lower grounds; should the winter have proved wet to the eastward, it will undoubtedly solve the problem.

At half past eight o'clock we proceeded up the river, which during our day's journey trended nearly north. Both banks appeared equally low: that on which we were travelling extended to the base of Goulburn's Range, and was wet and barren. About two miles from our night's encampment, we ascended a low stony hill, from which the country northerly was broken into detached hills; to the east was Goulburn's Range, and to the north-west

the country was low without any rising grounds as far as we could see. The sameness which had so wearied us during the last month was somewhat relieved by the various rising hills and low ranges which were scattered over the otherwise level surface of the country. A hill bearing N. 15 E. received the name of Mount Torrens; it stood quite detached. Two of the men, who were about a mile ahead of the main party, fell in with a small native family, consisting of a man, two women and three children, the eldest about three years old. The man was very stout and tall; he was armed with a jagged spear, and no friendly motions of the men (who were totally unarmed) could induce him to lay it aside, or suffer them to approach him: during the short time they were with him, he kept the most watchful eye upon them; and when the men calling the dogs together were about to depart, he threw down with apparent fierceness the little bark guneah which had sheltered him and his family during the night, and made towards the river, calling loudly and repeatedly, as if to bring others to his assistance: he was quite naked, except the netted band round the waist, in which were womerahs. The women were covered with

skins over their shoulders, and the two younger children were slung in them on their backs.

There was a very considerable fresh in the stream, and its windings to-day were singularly remarkable, insomuch that it was frequently taken for two different rivers; necks of land near a mile long, but not one hundred yards wide, being the only separation between several of the reaches. At three o'clock we halted on its banks, having travelled eleven miles and a half.

July 22.—The river had risen during the night upwards of a foot, and was now about eight feet from the banks; its breadth from thirty to fifty feet, whilst its apparent usual channel could not exceed from fifteen to twenty. The calls of the natives were heard this morning on the opposite side of the river. At nine o'clock we again proceeded up the river, which to-day trended east by north. About four miles east from our last station, we ascended a stony mount being near the north-east extreme of Goulburn's Range: the country to the north-east and round to east was without any eminences of magnitude, but several rising chains of low hills were scattered over the general surface of the country; they were mostly bare

of trees, being stony and barren. It is impossible to imagine a worse tract of country than that through which our route lay this day; to the very edges of the stream, it was a barren acacia scrub intermingled with cypresses and dwarf box-trees. The flats were uniformly swampy, and covered with bushes (rhagodea); the hills instead of grass were clothed with knapthalium. We repeatedly saw the river in our course, but I could find no eligible place to cross it, as the trees which would have suited our purpose for bridges were now, in consequence of the fresh or flood, in the very middle of the stream. The banks where the rising grounds came immediately on the river were high and of a red loamy clay, and when this was the case the opposite banks were seen to be low in proportion: when we halted for the night, they were not above five or six feet, and I think there must have been from ten to twelve feet more water in the bed of the stream than usual. Bad as the travelling was even close to the stream, it was still worse about two miles back from it; several small scrubs of the eucalyptus dumosa and prickly shrubs were passed through by the men who had taken out the dogs in search of game; and from the hill we first ascended, we

observed several very extensive scrubs to the northward, of the same description. At half past three we halted for the night, having gone about eleven miles.

July 23.—The river had fallen a little during the night. At nine o'clock we again set forward: the country became extremely low and marshy, far more so than any we had passed over east of Macquarie's Range. These marshes extended so far southerly that to have gone round them would have led us far from our purposed course without answering any useful purpose, and although we judged that at first they might not extend above three or four miles back, yet we soon had reason to change that opinion. The river had led us upon a general course nearly east about six miles, when about half a mile from the bank southerly, a very extensive lake was formed, extending about east-south-east and west-north-west from three to four miles, and being about a mile and a half wide. Excepting the sheet of water on the north side near the termination of the stream, this was the only one we had seen that could justly be entitled to the denomination of lake. We crossed over a low wet swamp, by which its overflowings are doubtless re-conveyed to the

river. This lake was joined to another more easterly, but much smaller. We could not form any correct judgment how far the marshy ground extended south-east of it; but the country was low and level as far as Mount Byng, and a low range extended north-easterly from it. We now kept the banks of the stream, till at the tenth mile we ascended a small hill a mile south of it, from which Mount Byng bore N. 12. E. Close under the hill ran a considerable branch of the river, which certainly supplied the lakes and lower grounds with water; on the other side of this arm, the country was low, and apparently marshy as far as we could see. On examination I found it would be extremely difficult to cross this branch, as the water was too shallow to swim the horses over, and the ground so soft that they could not approach the banks within several yards. I therefore determined to get upon the river nearly where this branch separated from it, and endeavour to construct a bridge, by which we might convey the provisions and baggage over: as to the horses, they could easily swim across.

The course of the river during the day had been nearly due east, but from the separation of the branch it

seemed to take a more northerly direction; the banks were very low, and never exceeded five feet from the water. Occasional points of land somewhat more elevated than the general surface would of course make them in places a little higher; but we could not discover any marks which denoted a greater rise than six feet, or six feet six inches, above the present level. When we halted in the evening, the stream was running with great rapidity. The water did not appear to have either risen or fallen during the day; but all the trees which would have best answered our purposes were now several feet in the water. We had however no alternative but to cross somewhere in this neighbourhood, as we were fearful of entangling ourselves in marshy ground by proceeding farther up this bank; and to attempt to penetrate, or even to round, the marshes to the southward, (if it were practicable,) would take up more time (without being of any service) than we could spare. Experience had made us too well acquainted with the nature of these marshes to run any needless risks; and we had besides great hopes that we should find better travelling to the northward, which as the river seemed inclined to come from that

point would also be a great convenience to us, as I did not purpose to quit its banks as long as it continued to run any thing north of east.

As to the soil and general description of country passed over this day, the low-lands were all swamps covered with rhagodia bushes, and where the land was a little more elevated, the soil was sandy and barren, covered with acacias, dodonœas, small cypresses and dwarf box-trees. Our course was E. 4. N. 6½ miles; but by the windings of the river, we had measured nearly 12 miles. The lake I named Campbell Lake, in honour of Mrs. Macquarie's family name.

July 24.—At day-light we attempted to construct our bridge near to the place where we were encamped, but as fast as the trees were felled they were swept away by the rapidity of the current; the breadth on an average being now, by reason of the flood, nearly sixty feet, and the trees on the immediate or proper banks being several feet in the water: we were therefore obliged to fell trees farther inland, and these, as before remarked, were swept away, falling short of the land on the opposite side.

All our attempts to construct a bridge during the day

were fruitless, as the flood was too violent to allow the trees to take firm hold: in searching the banks of the stream for a proper place for our purpose, an arm nearly as large as the main branch up which we had travelled was discovered about a mile down the stream on the north side; it ran to the north-north-west, and then apparently trended more westerly. Thus is this vast body of water, all originating in the Eastern or Blue Mountains, conveyed over these extensive marshes, rendering uninhabitable a tract which they might reasonably be expected to fertilize.

Finding that in the present high state of the water we could not succeed in crossing the river, at least near our present station, and that if we returned lower down we should experience a farther difficulty in crossing the north-west arm recently seen, it was judged best to try if we could get over the branch on the south side, and swim the horses over in the main stream near the mouth of the branch. We could not, however, find any tree on this side that would reach across; although it was quite dark before we gave over the attempt for the night.

July 25.—Every means was again employed in con-

structing the bridge over the south-west branch. The stream had fallen but a few inches, and continues to fall too slowly to permit us to entertain any hopes of crossing it in this vicinity.

Our bridge was finished by one o'clock, but it being too late to cross the horses and baggage this evening, I went in company with Byrne on horseback to view the country to the southward. After going about two miles and a quarter south of the tent, we were most agreeably surprised with the sight of a very fine lake; we rode down to its shores, which on this side were hard and sandy beaches. On the south side the shores were bolder, being red clay cliffs. We now found that the creek or arm which I had supposed to be the source whence Campbell Lake was supplied, had not any communication with it, but supplied the lake we now saw: a low ridge of hills, bare of trees except small cypresses in clumps, lying between the two lakes, which were distant from each other two or three miles. Finding I might obtain a better view by going to the point of these bare hills about five miles westward, I rode thither along the margin of the lake, but quitted it to ascend the hill, which was about two miles and a half

from it. The hill was but low in comparison with Goulburn's Range and other hills in the vicinity, but was sufficiently elevated to afford me the most varied and noble prospect I had seen in New South Wales. The expanse of water was too large and winding to be seen in one point of view, but it broke in large sheets from east to west for upwards of six miles; its medium breadth being from two and a half to three miles: it was bounded six or seven miles from its eastern extremity by a low range of hills connected with Mount Byng, and from the dark broken woody appearance of the country in that direction, I felt assured that the stream came from a more northerly quarter. To the westward was Goulburn's Range, distant about five or six miles; its bold rocky peaks of lofty elevation forming a striking contrast to the dead level of the country southerly, in which however Mount Acton appeared like a blue speck on the horizon. To the northward was Mount Granard, the highest of a very elevated range, it having been seen at a distance of seventy-two miles from Mount Acton; and to the north-north-east were extensive open flats; in one place, bearing N. 17. E., I thought I could distinguish water. Between

the hill on which I stood and the stream, Campbell Lake wound along the plain, but its width did not allow it to be so conspicuously seen as the present one. To the south-east and round to the north-east the country was covered with dark foliage of the eucalyptus, intermixed with the cypress; whilst to the south-west, as far as the base of Goulburn's Range, it was more open, with gentle hills clothed with a few small cypresses. These hills were rocky and barren, the lower grounds a red loamy clay; but the intermingled light and shade formed by the different description of trees and shrubs, the hills, but above all, the noble lake before me, gave a character to the scenery highly picturesque and pleasing.

From this eminence I took the following bearings to objects connected in the survey, viz.

The highest point of Goulburn's Range N. 225° distance 5 or 6 miles.
Do. Do. Mount Acton . 143
Table Hill 116
Mount Byng 114
West extreme of the lake N. 106. 30, distance 2½ miles.
East Do. Do. N. 65. distance 5 or 6 miles.
Highest point of Mount Grapard . . N. 341
Extremes of extensive flats from N. 346½ to N. 10. distance 12 or 14 miles, the last point being also the extreme of a low range.
Appearance of water or a lake . . N. 17°
Mount Torrens . . . . . N. 294½

Mount Davidson . . . . . N. 317½

Bluff point of the clear hill on which I stand, and to which bearings had been previously taken to ascertain its situation, N. 186, distance ¾ mile.

Low range of hills extending from Mount Byng to N. 55.; nearest part of that range, N. 81½, distance 8 or 9 miles.

I came back to the tent at half-past four o'clock; and it was extremely satisfactory to us to find, on laying the different bearings down on the chart, that the connexion of the survey with Mount Acton corresponded to less than a mile of longitude, although it had extended on a most varied course from that point between three and four hundred miles.

The water in the stream has remained stationary throughout the day.

July 26.—Mr. Evans set out to view the lake and take some sketches, whilst I remained to forward the horses and baggage over the arm of the river, by which time I expected he would return, so as to enable us to proceed at least a few miles farther up. By half-past eleven we had got the horses and every other thing safely over, and they proceeded up the river. Mr. Evans did not return until half-past one to the bridge, having been highly gratified with his excursion to the lake, of which he had taken two views.

After proceeding to the north-east about three miles, through a low, wet, and barren country, which is at times from eighteen inches to two feet under water, we came upon another fine lake about a mile distant from the river. This lake was not so large as the last, but was nevertheless a fine sheet of water, about three miles long and one and a half or two miles wide; the opposite or south shore was much more elevated than that near the river, which had here extremely low banks, the water in the stream not being above four feet below them; the marks of flood upon the trees were also upwards of three feet higher. The cypress-tree grew very thick and strong on the opposite side of the lake, casting a dark shade over its transparent waters, which, though certainly originating in the river, had not received any supply for apparently a considerable time. The land from hence to the place where we stopped for the night was very low and much flooded, with fine, deep, clear lagoons winding round almost every bend of the stream; the soil was also much better, having more the appearance of fertility than any we had seen for some time. About one and a half or two miles from the river a thick cypress brush bordered the low

lands, and was of course free from floods. The small dwarf box-tree still, however, continued to be the prevailing wood, and covered, as usual, the more wet and boggy portions of the low land. The north-west side appeared to be higher, and the banks, as much at least as we could see of them, seemed of better soil. A large native's canoe having been found hauled up near to the spot on which we stopped, appearing to me sufficiently strong to be capable of transporting ourselves and baggage to the opposite side of the river, I determined to make trial of it for that purpose, and if found practicable to cross at once, rather than wait the chance of the waters falling sufficiently to enable us to construct a bridge, where, in the event of failing in that design, no friendly canoe might be at hand to assist us.

The waters in the stream had not fallen at all, and were about four or five feet from the banks, continuing to run with great rapidity. The first lake seen yesterday was named the Regent's Lake, in honour of His Royal Highness the Prince Regent.

A superb scarlet flower, named kennedia speciosa, was found on the shore of the first named lake. The course

of the river this day was north-east, and our distance five miles and a half, although we had travelled upwards of eight and three-quarters.

July 27.—As soon as it was light, our little canoe was launched; but our hopes and expectations had been too sanguine as to her capability: sufficiently strong and buoyant to contain one person, more was too much for her; I therefore of neccssity abandoned the design, and at half-past nine o'clock again proceeded up the stream. The fresh did not in the least diminish, but I thought rather rose than fell. A line which had last night been thrown into the stream, with little hope or expectation of catching any thing, was found, when taken up this morning, to have hooked a very fine fish. Since the flood we had almost ceased to think of fish, as we never had the least success in our trials.

The river, as we had conjectured it would, trended this day again to the north-east. The country passed over was low and nearly level. The points and immediate banks were deeply flooded, forming extensive morasses, and there were generally between them and the drier and more elevated land deep serpentine lagoons, the water in

which was clear and transparent, it having been apparently a long time since that of the river had filled them. The back land was a red sandy loam, very light, covered with acacia bushes, spear-wood, and small cypresses; the only herbage, a coarse tea-grass; and yet I do not think the kind of soil which appears to be the universal one upon the drier lands, can be strictly called barren: I have seen apparently much worse soils in a state of cultivation. We crossed one or two large plains, clear of wood and even bushes; the soil a stiff tenacious clay, which, though not flooded by the river, retains all the water that falls upon it, there being no descent or fall by which it can be conveyed to its natural drain, the river. These plains were now dry and hard, and having been lately burnt, the coarse natural herbage springing up fresh, gave them a pleasing green appearance. One or two beautiful new shrubs in seed and flower were found to-day, to the great satisfaction of the botanists, who had not lately made many very splendid or valuable additions to their collections.

A party of natives was seen on the opposite side of the river, consisting of one man, two lads, and two women; they disappeared as soon as they observed us.

The flood had swoln the stream to a considerable breadth; it was at least sixty feet wide at the spot where we stopped, and was about six feet below the banks.

July 28.—The waters in the stream continue stationary. There must have been heavy rains to the eastward, to maintain at this height such a body of water. As to the rains that fall westward of the Blue Mountains, I am clearly of opinion, that they are in no way auxiliary in forming this stream. The soil, the general level surface, without a single water-course north or south, prove that all the waters which fall are quickly absorbed; and I think it very probable that rain falls here extremely seldom, and never simultaneously with the rain of the eastern coast and mountains.

The day was full of cross accidents, and ended in the separation of the expedition for the first time. The river turned suddenly north, whilst extensive swamps ran out from it to the south-east, backed by thick scrubby land, which we afterwards found, having taken another sudden bend into the north-west, to be at a considerable distance, and which we had some difficulty in finding at all, the smaller plains being separated from the larger one by

lagoons, edged with trees similar to those on the banks of the river.

Not having been able to find the rest of my companions this evening, I halted with three men on the spot where we reached the river, firing muskets, that if any of the missing party were near, they might be enabled to join us in the morning.

The bendings of the river were singularly remarkable, trending suddenly from south-east by east to north-north-west, and then back to the north and north-east; I mean the principal bending in the general course, for the smaller ones were as usual innumerable.

Of the swamps, which in places, extended from eight to ten miles from the river south-east and south, some parts were dry and others under water; and there were occasionally large lagoons covered with innumerable wild fowl of various descriptions. Great numbers of native-companions, bustards, and emus, were seen on the plains, which, at the termination of our day's journey, were of a better and drier description than usual. The north-east hills bounding them were low, thinly studded with trees, and although rocky on the summits, were covered with

green tea-grass. The flood in the river was very high, but from the appearance of the banks, which were about five feet from the water, I did not think it had risen much in the course of the day.

July 29.—At day-light sent a man on horseback to search for our missing companions up the river, as we thought we had heard a musquet in that direction in reply to one of ours. The man shortly returned, having met with two men whom I had seen yesterday looking for their horses; they had been joined by Mr. Cunningham, and had encamped about half a mile higher up the stream than ourselves: of Mr. Evans's party, consisting besides himself of five men, they had heard or seen nothing, nor had they fallen in with any of their marks. At half-past eight o'clock I proceeded with the horses up the river to join the two men, expecting also that Mr. Evans would certainly return downwards when he found that we did not join him. It was twelve o'clock before we found him, and we then proceeded up the river, whilst one man and myself went to a clear hill in the range of Mount Byng, and from which we expected a good prospect. We passed

over a large plain, washed by the river; the soil, a stiff red clayey loam, long parched by drought; the sides of the hill light red sandy loam. Small blue gum-trees, box, cypress, and a multitude of acacia shrubs of various species, were the usual productions of the drier and more elevated grounds.

Our expectations of an extensive prospect from the top of the hill were not disappointed: we had a distinct view round the compass. The river wound close under the foot of the hill, and trending to the south-east through low marshy grounds covered with rhagodia bushes and the acacia pendula, evidently and distinctly showed that it originated in the separated branches of the Lachlan, which it is probable united fifteen or twenty miles below Mount Cunningham, forming the present stream. The north-east side of the river was equally low and marshy. All the points which had been set at Mount Cunningham were distinctly recognised, and bearings being now taken to them, served to correct and prove the survey. The bearings taken from this hill, named Piper's Hill, were as follows by the theodolite:

Mount Cunningham	E.	9° 20′	S.
Mount Meyrick	S.	67 10	E.
Mount Maude	S.	62 0	E.
Table Hill	S.	4 30	E.
Line of Mount Byng, called Watson Taylor's range	E.	7 0	W.
Mount Granard	N.	79 0	W.
Mount Barrer	N.	68 0	W. about

the same distance as Mount Granard.

Extreme of a high range from N. 59½ W., to N. 24½ W.; nearest extreme distance about thirty miles, westward 45.

Extremes of another range from N. 10. W., to N. 2. W., about twelve miles long; another range, N. 8. E. to N. 50½ E.

Hurd's Peak, N. 72. E.; a mount north of it (Mount Hawkins), N. 71. 15. E.; a distant one, N. 86½ E. (Mount Riley).

Low ranges in N. 44. E., N. 35. E. and N. 26½ E., all the intermediate spaces being low level land.

On descending, we waited on the stream till the arrival of Mr. Evans, about half-past three o'clock, when we halted.

It was determined that as we had now ascertained the course of the Lachlan, from the depot to its termination, any farther trace of it, running as it did from the south-east, would take us materially out of our purposed course to Bathurst, without answering any good purpose, at the same time that we should entangle ourselves in the marshy grounds which had been seen both from Mount Cunningham,

Farewell Hill, and our present station; and that therefore we should immediately proceed to construct a raft on which we might transport our provisions and baggage across the river, afterwards taking such a course as we deemed most likely to bring us to the Macquarie river, and so keep along its banks to Bathurst. This work, and the task of getting the baggage over, will take two days to accomplish.

The stream where we stopped was about four feet from the banks, running with much rapidity; and I think the flood in it has rather increased than abated.

Almost directly under the hill near our halting-place, we saw a tumulus, which was apparently of recent construction (within a year at most). It would seem that some person of consideration among the natives had been buried in it, from the exterior marks of a form which had certainly been observed in the construction of the tomb and surrounding seats. The form of the whole was semi-circular. Three rows of seats occupied one half, the grave and an outer row of seats the other; the seats formed segments of circles of fifty, forty-five, and forty feet each, and were formed by the soil being trenched up from

Drawn by R.H.Evans.

Engraved by R.Havell & Son.

THE GRAVE OF A NATIVE OF AUSTRATIA.

Published Feb.1 1819 by John Murray Albemarle Street London

between them. The centre part of the grave was about five feet high, and about nine long, forming an oblong pointed cone*.

I hope I shall not be considered as either wantonly disturbing the remains of the dead, or needlessly violating the religious rites of an harmless people, in having caused the tomb to be opened, that we might examine its interior construction. The whole outward form and appearance of the place was so totally different from that of any custom or ceremony in use by the natives on the eastern coast, where the body is merely covered with a piece of bark and buried in a grave about four feet deep, that we were induced to think that the manner of interring the body might also be different. On removing the soil from one end of the tumulus, and about two feet beneath the solid surface of the ground, we came to three or four layers of wood, lying across the grave, serving as an arch to bear the weight of the earthy cone or tomb above. On removing one end of those layers, sheet after sheet of dry bark was taken out, then dry grass and leaves in a perfect

* See the Drawing.

state of preservation, the wet or damp having apparently never penetrated even to the first covering of wood. We were obliged to suspend our operation for the night, as the corpse became extremely offensive to the smell, resolving to remove on the morrow all the earth from the top of the grave, and expose it for some time to the external air before we searched farther.

July 30.—Employed in preparing dead cypress-trees for the timber of the raft. The rain continued throughout the day without intermission, and prevented us from making much progress with it. This morning we removed all the earth from the tomb and grave, and found the body deposited about four feet deep in an oval grave, four feet long and from eighteen inches to two feet wide. The feet were bent quite up to the head, the arms having been placed between the thighs. The face was downwards, the body being placed east and west, the head to the east*.

It had been very carefully wrapped in a great number of oppossum skins, the head bound round with the net

* "Nay, Cadwal, we must lay his head to the east; my father has a reason for it."—*Cymbeline.*

usually worn by the natives, and also the girdle: it appeared after being enclosed in those skins to have been placed in a larger net, and then deposited in the manner before mentioned. The bones and head showed that they were the remains of a powerful tall man. The hair on the head was perfect, being long and black; the under part of the body was not totally decayed, giving us reason to think that he could not have been interred above six or eight months. Judging from his hair and teeth, he might have been between thirty and forty years of age: to the west and north of the grave were two cypress-trees distant between fifty and sixty feet; the sides towards the tomb were barked, and curious characters deeply cut upon them, in a manner which, considering the tools they possess, must have been a work of great labour and time. Having satisfied our curiosity, the whole was carefully re-interred, and restored as near as possible to the station in which it was found. The river fell in the course of the day near two feet.

July 31.—Again employed in the construction of our raft, which I hope will be completed sufficiently early to-morrow to allow us time to get every thing over, and

encamp on the other side. The river fell about two feet in the course of the day, and still continues to fall rapidly. The dogs were very successful, killing three emus and a small kangaroo.

August 1.—Still employed on the raft, which will be ready for use about one o'clock. The river fell a foot during the night, but the trees that would have been useful to us are still under water. The mean of the different observations made here gave the following results.

Mean lat.	33°	04′	2″ S.
Comp. long.	146	31	50 E.
Variation	7	23	00 E.

The series of triangles by which the longitude from our situation on the 17th of May has been computed, corresponds precisely with the bearings taken from this station to the principal objects forming their bases, and whose relative situation on the chart had been fixed on the 17th of May; it was extremely satisfactory to find in so extensive a survey that the angles should thus so completely verify our situation.

Our raft was finished and launched by one o'clock;

its capability of carrying any burden we had to put upon it fully answered our expectations; but here its utility ended, the violence of the current caused by the high flood or the stream rendered all our labour abortive, as no exertions we were capable of making could enable us to get it across the stream. We had stretched a line across the river by which to tow it over, but the men were not able to withstand the force of the current acting on the body of the raft; they let go their line and were carried about three quarters of a mile down, when they were brought up by some trees and got safe on shore, making the raft fast. The flood had been slowly subsiding all day, giving us hopes that we should still be enabled to fell some trees for a bridge, which was now our only resource, as it was considered most advisable to use our utmost efforts to cross here rather than go farther up the stream.

August 2.—Cloudy weather with heavy rain during the night, which still continues. We commenced felling some trees, which we were in hopes would answer our purpose, our anxiety to cross being very great; as it is probable, from the long continued fine weather we have

experienced until lately, that the rainy season in this part of the country may shortly set in, which would extremely embarrass and distress us.

We were again disappointed in our hopes of crossing by means of trees, as the flood which still continued swept them away as soon as felled. I sent Byrne up the stream to endeavour to find a better place; but he returned in the afternoon without any success: he reported that about three or four miles above the tent a branch joined the stream, that he had travelled up it six or seven miles, but not far enough to say where it quitted the main stream; the low plains were several inches under water from the present rain; and the ground that appeared the driest was the worst to travel on, being a wet, loose, sandy bog. As the flood continued rapidly to subside, we resolved upon again trying the raft to-morrow morning; all hands were accordingly sent to tow her up, which was accomplished by night.

August 3.—A bleak cold morning, with continued small rain. At day-light we set to work with our raft; and after many trials had the satisfaction to find that we should succeed in getting over our baggage. Whilst Mr.

Evans superintended this work, I rode up the river with Byrne to see the branch: I found it but an inconsiderable one, being merely a lagoon, except in times of flood like the present, when it appears nearly as large as the parent stream; it forms an island ten or twelve miles long, and from two to four broad. The impossibility of our travelling up this side was demonstrated, as well as the nature of these lower grounds or clear plains, which retain all the water that falls upon them, the little inequalities forming shallow pools. It was much better travelling over them, than on a low ridge of hills a couple of miles from the river on which I returned; the soil of the latter being so loose and boggy as to render it difficult for the horses to proceed.

On my return I found considerable progress had been made in transporting our luggage, and by four o'clock every thing was safely crossed; our little bark was however completely water logged, and at last would scarcely support a single man, though when first launched, three or four might venture in her with safety.

As I think the state of the seasons in New South Wales may serve to explain, at least partially, why there

are no running streams in the western parts of it, it may be worth while to make some little inquiry into that subject. It appears to me that it can never rain simultaneously westward of the Blue Mountains and on the coast, for these reasons: first, That the Lachlan and Macquarie Rivers, being the sole channels by which the waters falling on the Blue Mountain range are conveyed westward to the low-lands, are always flooded in times of great rains in those mountains and on the coast; secondly, That the winter, that is to say, the period between March and August, is the time when the rains are most to be expected, and have most generally fallen on the east coast, and which so falling would naturally cause a flood in the streams above mentioned; thirdly, That in the summer season, or from September to February, which is certainly the driest period of the year, the rains fall westward of the Blue Mountains; but falling upon flat sandy land without any watercourses, do not in the smallest degree add to the waters of the Lachlan or Macquarie, which are then consequently in a state nearly if not entirely stagnant. It is at this season, therefore, that these streams are visited by the natives, as they are then enabled to procure

the shell and other fish which abound in them. The tracks and impressions made by the feet of the natives were certainly made when the ground was very soft and marshy, whilst their guneahs were merely the branches of trees, and erected in places which we found to be swamps, but which in summer would, in comparison with the plains, be dry ground, the waters from them being drained off into the river.

The Blue Mountain range is by far the highest in New South Wales; the ranges westerly, though high when viewed from the low gr[illegible]om which they rise, cannot in any respect be compared with them.

In the summer, the north-east and south-east winds coming from the sea are forced over these mountains, and the vapours with which they are charged are attracted by the lower ranges westerly, and converted into rain. In the winter, the prevailing winds on the coast and inland, as is evident from the trees on the tops of the hills, are from south-west to north-west. In the winter, these westerly winds blowing over a vast extent of country, and coming with great violence on the Blue Mountains, confine those clouds and vapours which would occasion

rain, to the vicinity of the coast, and the eastern side of the mountains. A wet summer on the east coast would occasion a flood in the Lachlan at that season; and should the rains then be attended with easterly winds, causing rain on the western side also, the whole low country must be under water for a double reason. This is a circumstance which, I think, could seldom happen, otherwise the consequence to the miserable natives must be dreadful.

It may be remembered that for nearly two years (viz. 1814 and 1815), scarcely a drop of rain fell on the east coast of New South Wales; and when the country about Bathurst was first visited, it bore marks of being similarly affected by drought. The last summer was a very wet one on the east coast; at the depot on the Lachlan, during that period when the rains were heaviest (in February), the people enjoyed the finest weather, at the same time the river was constantly flooded, sometimes rising to a great height in the most sudden manner.

Since the present expedition has been out it has generally enjoyed dry, clear weather, otherwise we could not have travelled. Our meteorological journal will, when compared with one kept at Sydney, throw farther light

upon this subject; and I merely hazard the above ideas as hints for a more general and extended view of the natural causes which seem to govern the seasons in this truly singular country.

Another proof (if more were wanting) that the river is only periodically full and flowing, I think may be derived from the numberless windings of the stream, setting aside the general course. If the water was always running, it would doubtless have forced a straighter channel through the soft, loose, sandy, loamy country through which it flows; it being also remembered that there is not a single stone or rock to be found along the whole banks of the river: the few low rocky hills that terminate upon it, either have a narrow slip of soft land between their base and the river, or the country is flat to a considerable distance on the opposite shore. Its windings and sudden bends are so remarkable, that I am sure I under estimate it, when I consider that on a straight line of ten miles from point to point, the water passes over twenty-five miles; in many places, from thirty to thirty-five would be within the truth.

The animals differing from those in the neighbourhood of Bathurst are but few: the principal is a new species

of red kangaroo; a smaller species of the same, having a head delicately formed, called by us the rabbit-kangaroo. Two other birds besides the pigeon and cockatoo before-mentioned may be noticed: we suppose them to be both birds of night, being only heard at that time; neither of them was seen: one was remarkable for exactly imitating the calls of the natives, the other the short sharp bark of the native dog, insomuch that our dogs were constantly deceived by the noise.

August 4.—Proceeded to the north-east by east, intending to keep that course for two or three days, to clear us of the low grounds north of the Lachlan, before we bent more easterly for Bathurst; the above course would also carry us so far northward, as to ensure our falling in with the Macquarie at a considerable distance from the settlement, and also enable us to discover if any similar streams had their source westerly of the high range from whence the coal river derives its source, as we shall then be some miles north of that port.

Our route lay through a low wet country for the first eight or ten miles, the flats covered with the acacia pendula; the last three miles were rather more elevated:

the soil in general a loose, red, sandy loam, with small cypress, box, and acacia trees; a few acres in patches had been burned, occasionally relieving the eye from the otherwise barren scrubby appearance of the country. We passed through two or three small eucalyptus scrubs, and upon getting out of one, having gone thirteen miles and a quarter, we fortunately happened to fall in with a native well, containing a few gallons of water sufficient for our own supply; whilst the open level land which the scrub led to having been burnt, we hoped would afford succulent herbage sufficient for the horses, and prevent them from suffering from the want of water. Our course was N. 69 E. thirteen miles.

August 5.—The water for our breakfast drained our little well to the dregs. Hoping that we should be more fortunate in this day's route, at half past eight o'clock we again set forward, on the same point as yesterday.

The first four miles of our course led through one of those dreadful scrubs of eucalyptus dumosa, and prickly grass, which we had often before experienced; it was on rather an elevated plain, and, exclusive of the difficulty of forcing a passage through it, was extremely boggy and distressing to the horses. After passing through it, the

country for five or six miles farther was more open, the same elevated plain or level still continuing, being thinly studded with box and cypress trees, with abundance of acacia and other shrubs: the soil a loose, red, sandy loam. At the tenth mile we providentially found a small muddy hole of water which, bad as it was, refreshed both men and horses extremely; fearing, from the appearance of the country, that we should not find any water farther on, we filled our small keg, containing nearly three gallons, which would at all events free us from absolute want. We went four miles farther through the same desert country, when evening drawing on, and the small trees and shrubs becoming thicker, we thought it best to stop before we again encountered an eucalyptus brush; which not affording the smallest fodder for the horses, would, added to the want of water, render them in all probability unable to take either us or themselves out of the desert in which we were.

The spot we halted on afforded some dry tea-grass and a few syngeneceous shrubs; and praying for a heavy dew to moisten them, we hoped the animals would not on the whole fare much worse than ourselves.

The rain which had fallen while we were on the river

was not perceptible here; indeed I think sufficient to deluge any other country must fall, before it is seen on the surface of such a soil as prevails in this part of New South Wales. A little rain renders it however so soft and slimy as to make it difficult to travel over; and I should conjecture, from the milky whiteness of the water in the holes we have seen, that it rests on a substratum of white clay three or four feet below the surface; the water holes at least had that bottom, although their margins were of the red, sandy loam before mentioned.

An accident happened to the vessel containing the mercury of the artificial horizon, by which the greater part was lost, leaving scarcely sufficient for use. It had been a matter of surprise to me that such a misfortune had not occurred sooner, the box containing the instruments, &c., being so shaken by the horse forcing his way through the scrubs, that I considered myself extremely fortunate not to have been deprived of the use of them long before. To carry barometers, and other delicately constructed mathematical instruments, safely through such a journey as the present is impossible. Our course made

good was N. 68 E., distance thirteen miles and a half. The evening fine and clear.

August 6.—Proceeded on our course, which led us for nine or ten miles through what might be termed an open forest country, with respect to the timber growing on it, but it was overrun with mimosa and acacia bushes, many of which were coming into flower, relieving in some measure the sombre foliage of the cypress and box trees which were scattered among them: it was rather an elevated tract that we travelled through, with such gentle rises and descents as to be almost imperceptible from a level surface. I ascended a hill about three miles north of the road, but could see nothing remarkable in any direction, the whole appearing irregularly broken into low hills and valleys, thickly clothed with small trees and bushes. At the eighth mile we came upon a small water-hole, which our poor horses soon emptied; again at the tenth mile, just at the commencement of a very broken stony range, we also found a few gallons of water, which the horses also enjoyed, it being much too muddy for our use; and besides, we had hopes that after passing the

range of hills in which we were about to enter, we should find water on the other side. The range continued in short broken hills for upwards of three miles and a half, and led through such a country as distressed both men and horses exceedingly: the surface was covered with small quartz stones, without herbage of any kind. The box and cypress trees disappeared, and their place was supplied by a numerous species of iron bark, between which the acacia, mimosa, and a new prickly acacia rendered it almost impossible to force a passage: after enduring this for upwards of three miles and a half, we began to descend, by keeping a more easterly course; but before we could come into a better country, either for grass or water, we were obliged to halt for the night, being too much fatigued to proceed farther.

Our search after water was not attended with success, but the ground being extremely boggy, we were in hopes of procuring a little by digging. Our spade, which had so unfortunately been left at Bathurst, would now have been of the most essential service, but the carpenter's adze proved a useful substitute. Choosing a place which seemed most likely to have received the drainings of the

hills, and on which a little rain-water still remained, we dug a tolerably good well, and in a few hours were rewarded by obtaining near a quart of thick muddy water per man, which by boiling, skimming, and straining, was rendered palatable to persons who must otherwise have gone without their dinner or breakfast the next morning, it being impossible to eat either our bread or pork without something to quench our thirst.

The soil of the country passed over was of the same red, sandy description as on former days; the hills were covered with small pieces of broken white quartz, and occasionally a large granite rock showed itself from beneath the surface. The botanical productions of the hills seemed also to undergo a considerable change, indicating, as we would fain hope, that a better country is not far off. Several new plants were acquired to-day, some of which were very beautiful. Our course made good was N. 71. E., distance thirteen miles and a half.

August 7.—The horses suffered much from want of food and water; but it is absolutely necessary to proceed and get into a better country with all the expedition which we are capable of using, and which the nature

of this country will allow. It is some consolation to us that the horses are but lightly loaded, by reason of our not being now encumbered with much provisions, and are consequently enabled to travel farther and better. At half past eight o'clock we again set forward, and for four miles and a quarter continued to pass through the same thick, barren country as yesterday, the ground being absolutely covered with acacia of various species, some extremely beautiful; after which the country became more open; the grass had been burnt, and the marks of the mogo or stone hatchet on the trees, made by the wandering natives of these deserts in search of food, gave us renewed hopes of soon coming to water. A rose-hill parrot was seen for the first time for many months, and we were farther fortunate in killing a fine kangaroo. The country seemed to improve as we advanced, and at the ninth mile, as we had been gradually ascending, we were gratified by an open prospect to the eastward, which showed low gentle hills and valleys thinly studded with trees. The broom-grass, now dead, gave them a white appearance, and, contrasted with the acacia in full flower, and the darker foliage of the trees, gave the whole the

most pleasing and varied aspect. To the north-west round to the north, the country was nearly the same; but from north to north-east by east, it was more broken into low barren hills; the tops and sides covered with iron bark, and cypress growing among the interstices of the granite rocks. We had however seen no water, but there was something in the aspect of the whole country that flattered our hopes of finding it in some of the valleys that lay in our course; nor were we disappointed: after going rather more than four miles farther, through a very open country, thickly covered with broom-grass (killed by the frost), we ascended a rocky hill of moderate elevation, connected with others lying east and west: opposite to us was a low rocky range, the summits of which were clothed with iron bark and camarina trees. We saw from this hill Mount Melville bearing N. 175., Mount Cunningham N. 189½., Mount Maude N. 192., a round mount N. 218., named Mount Riley, a gap in a range N. 283., distance about thirty miles: descending into the valley we found plenty of water, to our great relief, as the horses were quite exhausted, and without this seasonable supply would have been altogether unable to proceed farther. The

grass in the valley, although perished by the winter's frost, was very tolerable, and the worn out state of the horses made me determine to remain here to-morrow, to recruit them a little before we proceeded farther.

The country we have passed through this day afforded some of the most beautiful specimens of acacia which we had yet seen, at the same time that they were quite new in the species. The soil however was still of the same description, red and sandy, but for the last five or six miles more firm and compact; many of the plants were recognized as having been originally seen in the neighbourhood of the Macquarie River, and not since: this, with the more generally open appearance of the country, gave us hopes that in a few days we should be fortunate enough to fall in with that stream, which would free us from any farther apprehensions of suffering from want of water; for in that event it is my intention to keep in its immediate vicinity until our arrival at Bathurst. Our course made good was N. 71. E., distance thirteen miles and a quarter.

August 8.—Made the usual observations to ascertain our situation, the result of which placed us in lat. 32. 47. 58. S.,

long. 147. 23. E., and the variation of the needle 5. 20. E. The valley in which we encamped is inclosed by forest hills on all sides but the east, affording us plenty of water from what is, even at this dry season, a perceptible stream. The grass however was quite killed by the frost, and, although abundant, did not afford such nourishment to the horses as their condition required, insomuch that if we fall in with a part of the country that has been burnt in the course of to-morrow's route, I shall give them a day's rest.

Kangaroos of a very large size abound in every direction around us: our dogs killed one weighing seventy or eighty pounds, which proved a great and refreshing acquisition to us.

To the valley I gave the name of Emmeline's Valley, and the hill from which we corrected our survey with Mount Melville and Mount Cunningham, Macnamara's Hill. The day was clear and mild, and in the course of it some new and fine plants were procured.

August 9.—The morning fine and pleasant. At half past eight we left the valley, intending still to keep our course north of east, as the most likely point on which to

make the Macquarie River, from which, judging by the botanical productions of that stream, we cannot be very far.

For three or four miles the country was tolerably open and good, being clothed with luxuriant broom-grass. The cypress trees of good dimensions; but no signs of water. For the remainder of our day's journey, we passed over tracts of low barren ridges covered with brush, and iron bark trees, and open valleys; the country was of moderate elevation, but still we were not so fortunate as to find any water, although every slope was searched. After having travelled fourteen miles, during the latter part of which it rained hard, I thought it most advisable to stop, as we had just passed through a thick brush into a more open country, which would afford the horses something to eat; the rain, which still continued, relieving us from apprehension of their suffering much from want of water. As to ourselves, we had taken our now usual precaution to fill our keg, which gave us a pint each for our evening consumption, and the same quantity for breakfast the next morning.

In the course of the day the stirculia heterophylla was

very abundant, and we remarked that the cypresses were those originally known as the cupressus australis, and not of either of the other two species, which were common in the neighbourhood of the Lachlan. The brushes and scrubs were the only places that afforded any thing to the researches of the botanists; the open lands being covered with grass, and the shrubs being of acacias, whose species had been already often seen on this side of the Blue Mountain range.

August 10.—The morning proved clear and mild, and at nine we again proceeded; as it was impossible to remain in a place that did not afford us any water, and not good grass.

The country continued open forest land for about three miles, the cypress and the bastard box being the prevailing timber; of the former many were useful trees. We seemed neither ascending nor descending, but travelling on somewhat of an elevated plain. The broom-grass was very luxuriant, being four or five feet high; the soil, as before, a light, red, sandy loam. To this open tract succeeded three miles of barren brush land, covered with clumps of small cypresses, iron barks, and acacias; the slightest

elevation or ascent was always stony, and in one or two places large masses of granite rock were observed. We have hitherto seen no other signs of this being an inhabited country than the marks usually made by the natives in ascending the trees, and none of these were very recent. It is probable that they may see us without discovering themselves, as it is much more likely for us to pass unobserved the little family of the wandering native, than that our party, consisting of so many men and horses, not travelling together, but sometimes separated a mile or two, should escape their sight, quickened as it is by constant exercise in procuring their daily food.

At the end of the brush we came upon a large chain of ponds, the fall of water in which being north, induced us to believe that the Macquarie could not be far distant: we proceeded down them about a mile, when the situation offering us all we could wish for, we halted for the night, it being past two o'clock, determining to remain here to-morrow for the sake of the horses.

The country on the east side of this chain of ponds was again an open forest as far as we could see in that direction; which however was not very far, as we were

nearly on a level. I rode down the ponds six or seven miles, hoping to fall in with their junction with the river. Two or three miles from our halting-place the ground became very scrubby, and was much over-run with brush and small pines; there were marks of flood in the water-course of the ponds, from eight to ten feet high. I saw several shags, ducks, herons, cranes, and other birds that frequent low or watery situations, but the night coming on obliged me to return.

August 11.—Along the banks of these ponds, several transitory encampments of the natives were found, but none that had been inhabited within these four or six months; by all of them were found abundance of the pearl muscle-shell so common on the Lachlan. The soil, as far as we examined round our tents, east of the ponds, was a good sandy loam. The timber very open, and if the country had been divested of the numerous acacia bushes with which the face of it was covered, it would be impossible to wish for land more lightly timbered: the grass bromus was very luxuriant. The ponds appear to have not been flooded for a very considerable time, the water in many being of a milky whiteness, and the dry channels are

overrun with reeds and grass. These ponds were called Coysgaine's Ponds, and by our observations the tent was in lat. 32. 44. 29. S., long. 147. 46. 30. E., mean variation 7. 18. E.

August 12.—Proceeded on our course, which, as I hoped and expected we were not far from the Macquarie River, was altered to north-east, for the purpose of joining it lower down than our former course would have done; being anxious to know as much of the country in the vicinity of the river as our time and circumstances would permit. An open forest country with tolerably good soil continued for nearly five miles, when we suddenly came upon a large swampy plain surrounded by the acacia pendula. Water was still remaining on several parts of it, and we had no doubt from its whole appearance that it would lead immediately to the river; from the south-west edge of this plain (which was six or seven miles round), we had a distant prospect of a very lofty mountainous range to the eastward, named Harvey's Range; the north extreme of which bore north, and the highest part N. 94. This range was by far the highest we had seen westward of the Blue Mountains, and its elevation could be very

little if at all inferior. Crossing this plain and pursuing our north-easterly course, we entered a poor barren country covered with box trees, and low acacia shrubs; our hope of meeting the river was however disappointed. We travelled upwards of six miles through this box scrub, when coming to two or three holes of good water I thought it advisable to halt, rather than proceed a mile or two farther, which was the utmost we could have done; and then in all probability, be obliged to halt at a spot that would not afford us that necessary article.

The inclination of the loftier trees, particularly the cypress trees, for these two or three days past, denoted the strength and prevalence of the south-west and westerly winds: this is more easily discernible from the tops of low ranges; the western side of the tree being generally deprived of its branches, and the trunk bent in a remarkable manner to the north-east. This inclination and prevalence of the winds was not observed in any particular degree westward of Mount Cunningham, and was most remarkable in that elevated range of country lying between the depot on the Lachlan and Bathurst; and which elevated tract continues with little interruption to the western base of

the Blue Mountain range, on which there is not a single tree that does not denote prevalence of the westerly wind.

August 13.—Again set forward, intending to keep a north-easterly course through the day, when if we do not fall in with the river, our future course will be directed more easterly; as we shall be then full seventy miles north of Bathurst, and north of the parallel of Port Stephens. The country through which our course led us to-day was of various description, the first three miles and a half being indifferent forest land, open with respect to timber, but much overrun with small acacia bushes; at the end of this tract was a small stream of water in ponds, having its course in the lofty range east-south-east of us, and which was not very distant from us; this stream was named Allan Water, and its stream was northerly. The next four miles north-east of this burn was through a barren scrubby country, full of dry water-holes, and thickly covered with the camarina filifolia, box trees, and acacia bushes. The cypress seemed to shun this kind of barren clayey soil, and was more prevalent and flourishing on the open forest land where the soil was light and loamy, and covered with luxuriant broom-grass; this was the case

for the last few miles, which consisted of a very good tract of land. The cypresses here grew into very handsome timber, and indeed were the only useful wood, as the box tree was usually stunted and crooked. At the end of twelve miles we found a small spring of water that supplied some ponds, which also run northerly. The grass being pretty good, although old, we determined to halt for the evening, as the horses were not all arrived, having had a considerable detour to make in crossing Allan Water. On the banks of that burn many heaps of the pearl muscle-shells were found, and marks of flood about eight feet. We have for several days past seen no signs of any natives being recently in this part of the country; the marks on the trees, which were the only marks we saw, being several months old, and never seen except in the vicinity of water. Marks of the natives' tomahawks were to us certain signs of approaching water.

August 14.—We had now come from the river Lachlan upwards of an hundred miles in a north-east direction, without being so fortunate as to fall in with the Macquarie; we were also near seventy miles north of Bathurst, and much about the same distance west of it: it was therefore

evident that the Macquarie must have taken at least a north-north-west course from the place where it was last seen; how much farther north it had gone, of course we were ignorant: it is however probable, from the watercourses we have lately passed leading northerly, that the above point would be nearly the course which it has taken. To travel farther to the north-east would lead us very far from our proper route to Bathurst; farther indeed than we had provisions to enable us to travel, having only from Saturday next enough for fourteen days at a reduced allowance; and that time I calculated would be barely sufficient to take us to Bathurst on a direct course, presuming no local obstacles to arise. These considerations induced me to alter our course to east, which however would be nearly at right angles with that which we imagined the river to have taken, and would therefore enable us to reach it perhaps as soon as on any other course, as we could only infer its probable situation from the nature of the country over which we travelled. At half past eight o'clock, we again set forward on the above course (east): it led us generally through a good open grazing country for about eight miles, when it became

more broken and hilly; these hills were all covered with grass, their summits and sides rocky, with small stones: the colour of the soil had been apparently getting darker for some miles, and was now a light, hazel-coloured, sandy loam. The small blue eucalyptus, so common in the neighbourhood of Bathurst, again made its appearance, taking the place of the box tree; iron and stringy barks of small size were also common on the tops and sides of the hills: two Sydney or coast plants were also seen. Between the eighth and ninth mile we ascended a small hill, whence we had a distant view from the south round by the west to north, taking in that tract of country over which we had passed. Not a hill or eminence of any kind broke the dead level surface of the country in those quarters; and the day was so clear, that had any been within sixty or seventy miles they must have been seen. From the east to the south was the lofty range before mentioned, and now distant five or six miles: it was broken and rocky; iron bark trees were however growing on the very summit. To the north-east and north our view was not more than ten or eleven miles, being broken into low grassy hills of pretty much the same elevation

with that on which we stood. The smoke of several natives' fires were seen in the range to the eastward, and some to the north-west. Proceeding about four miles farther to the eastward among those hills, we halted in a pretty valley, having a small run of water in it falling northerly. We had just pitched our tent when hearing the noise of the stone-hatchet made by a native in climbing a tree, we stole silently upon him, and surprised him just as he was about to descend: he did not perceive us until we were immediately under the tree; his terror and astonishment were extreme. We used every friendly motion in our power to induce him to descend, but in vain: he kept calling loudly, as we supposed for some of his companions to come to his assistance; in the mean time he threw down to us the game he had procured (a ring-tailed opossum), making signs for us to take it up: in a short time another native came towards us, when the other descended from the tree. They trembled excessively, and, if the expression may be used, were absolutely *intoxicated* with fear, displayed in a thousand antic motions, convulsive laughing, and singular motions of the head. They were both youths not exceeding twenty years of age, of good countenance and figure, but most horribly marked by the skin

and flesh being raised in long stripes all over the back and body; some of those stripes were full three-quarters of an inch deep, and were so close together that scarcely any of the original skin was to be seen between them. The man who had joined us, had three or four small opossums and a snake, which he laid upon the ground, and offered us. We led them to our tent, where their surprise at every thing they saw clearly showed that we were the first white men they had met with; they had however either heard of or seen tomahawks, for upon giving one to one of them, he clasped it to his breast and demonstrated the greatest pleasure. After admiring it for some time they discovered the broad arrow, with which it was marked on both sides, the impression of which exactly resembles that made by the foot of the emu; it amused them extremely, and they frequently pointed to it and the emu skins which we had with us. All this time they were paying great attention to the roasting of their opossums, and when they were scarcely warm through, they opened them, and, taking out the fat of the entrails, presented it to us as the choicest morsel; on our declining to receive it they ate it themselves, and again covered up the opossums in the hot ashes. When they were apparently well done, they

laid them, the snake, and the things we had presented them with, on the ground, making signs that they wished to go; which of course we allowed them to do, together with their little store of provisions and such things as we were able to spare them. The collection of words which we had made at the depot on the Lachlan, we found of no use, as they did not understand a single one. They had neither of them lost the upper front tooth, though apparently men grown.

August 15.—We were somewhat disappointed in not seeing anything more of our native acquaintances, as we hoped the treatment and presents they had received would have induced them to return to us with their companions, as they had endeavoured to make us understand by signs they would. At eight we proceeded on an easterly course, when a mile of gently rising ground brought us to the edge of a fine valley, in which was a chain of ponds connected by a small stream; alternate hills and valleys of the best description of pasture land: the soil, a rich, light, sandy loam, continued until we halted, at the end of eleven miles, in a spacious, well-watered valley; where to our great surprise we found distinct marks of cattle tracks: they were old, and made when the ground was soft from

rain, as appeared from the deep impression of their feet, These cattle must have strayed from Bathurst, from which place we were now distant in a direct line between eighty and ninety miles. From several of the hills over which our route led us, we had the most extensive and beautiful prospects; from thirty to forty miles round, from the north to south, the country was broken in irregular low hills thinly studded with small timber, and covered with grass: the whole landscape within the compass of our view was clear and open, resembling diversified pleasure grounds irregularly laid out and planted. The animation of the whole scenery was greatly increased by the smoke of the natives' fires arising in every quarter, distinctly marking that we were in a country which afforded them ample means of subsistence; far different from the low deserts and morasses to the south-west.

The tops of the hills were generally stony (granite of different degrees and qualities), but the broom-grass grew strongly and abundantly in the interstices. We never descended a valley without finding it well watered, and although the soil and character of the country rendered it fit for all agricultural purposes, yet I think from its general clearness from brush, or underwood

of any kind, that such tracts must be peculiarly adapted for sheep-grazing; there being no shelter for native dogs, which are so destructive and annoying in other more thickly wooded parts of the country. In the fine valley where we pitched our tents, our dogs had some excellent runs, and killed two large kangaroos; the clearness of the country affording us a view of the chace from the beginning to the end.

Some of the baggage horses, which were a mile or two behind the others, came up to the tents, with nine natives, who had joined them on the road: they were entirely unarmed, and there was but one mogo, or stone-hatchet, among them; we had reason to suppose that their women and children were at no great distance, as they were observed to hide themselves when the men were first seen. The greater part of them had either seen or heard of white men, as they were neither alarmed nor astonished at what they saw. I should think that the loss of the front upper tooth is not common to every tribe, as several of these men retained it, although others were without it; the wearing a stick, or bone, through the cartilage of the nose, appeared common to all of them. They remained about an hour with us: we gave them the fore-quarter

of a kangaroo, and putting our remaining pork into a bag, we distributed the iron hoops of the keg in small pieces among them; these were received with as much pleasure as an European would have felt at being presented with the like quantity of gold. It was impossible distinctly to make out anything that they wished to express, by reason of the variety of their gestures; but their frequent pointing to the south-east (the direction of Bathurst), induced us to believe that they thought we were going there, a conjecture which we did all in our power to confirm. Wishing, if possible, to learn if they knew anything of the river, a fishing-hook was given to one of them, but he did not seem to understand the use of it until Mr. Evans drew the resemblance of a fish, and made signs that the hook was to take it, when they immediately understood him, and pointing to the east made signs that the fish were there; but our endeavours to learn the distance of the river were wholly fruitless. They appeared a harmless, inoffensive race of people, extremely cautious of giving offence, and never touching anything until they had first by signs obtained permission. Many of the words collected at the depot were known to them, others were not; but ignorant as we of course were of each other's meaning, we found it

a vain task to endeavour to learn their names of things. To collect a vocabulary of words in a strange language, it is in some measure necessary that the party who is to afford the knowledge should understand for what purpose he is questioned, which it was impossible to make these simple creatures comprehend. They left us about an hour before sun-set, highly gratified with their adventure.

August 16.—Quitted the valley (which was named Mary's Valley) on our eastern course, anxiously hoping that we should reach the river in the course of the day. We had heard last night and this morning the screams of the white cockatoo, which we have always looked upon as a certain sign of approaching water.

The same fine grazing tract of country continued over irregular hills and valleys for about four miles, when ascending a high hill (named Mount Johnston), a little upon our left, we had a very extensive view to the north-east and east. In the former quarter, a beautiful range of hills stretching north and south, bounded at a distance of about eight miles the fine extensive valley before us; under those hills we would fain have found the Macquarie, fancying that we could distinguish the haze arising from

water. To the northward, two hills skirted the valley at a distance of six or seven miles, which might be about the medium width of it from north to south, in which quarter a rocky range, clothed with pines and iron-bark, prevented us from seeing to any great distance; to the east and south-east, the same low irregular country appeared, thinly covered with trees and grass.

Desirous of ascertaining if our conjectures were well founded in respect to the river, we altered our course, which was east, to north-east, keeping down the south side of the valley or plain, which we had seen from Mount Johnston. A finer or more fertile country than that we passed through for about four miles and a half cannot be imagined: the soil, a light brown, sandy loam, covered with broom-grass from four to five feet high. After travelling the above distance, we most unexpectedly came upon a stream, which from its high grassy banks and rocky bottom we were obliged to conclude must be the river we were in search of; but so diminished in magnitude that the motion of the water connecting the long chains of reedy ponds, was so slow as scarcely to entitle it to the appellation of a living stream. The whole country from

where we quitted the Lachlan to this spot had borne evident marks of long continued drought, and in no part was it more apparent than in the present stream, which was so much smaller than it was at Bathurst, even after the great drought in 1815, that after going up it three or four miles, I began to entertain great doubts of its being the same, hoping that it might be one of the channels which must convey the waters from the high ranges of hills, lying nearly midway between the Lachlan and the Macquarie Rivers.

Observing a fine and extensive flat on the opposite side of the stream, which having been formerly burnt, was now covered with good grass, we crossed over at a place not ancle deep, and about six or eight feet wide, over a bottom of sand and stone, and halted for the evening; intending also to remain the ensuing day, to refresh the horses, as they had performed an excellent and continued week's work, and much required it.

On reaching the present stream numerous cattle tracks were observed, and although not very recent, I do not think they were more than four or six months old, since the marks of young cattle were among them; it is probable they were those that have been missing for a length

of time from the government herds at Cox's River, and are now straying wild through this beautiful country, abounding in every thing that can tempt them to remain here.

The plants on the banks and in the stream were precisely similar to those on the Macquarie in the vicinity of Bathurst; but I have observed that no certain conclusions can be drawn from a similarity between the botanical productions of two places, a truth which has been exemplified more than once in the course of this Journal.

August 17.—During the whole day the weather did not permit me to make the usual observations; it was not however uselessly passed, as the country was examined several miles to the north-east and east of our tents, and every report concurred as to the general beauty and goodness of the tracts passed over. Mr. Evans and myself ascended a high grassy hill about a mile and a half north of the tent, and the prospect round was highly pleasing. The general appearance of the country southerly made me still adhere to the opinion I entertained that the stream along which we were travelling would prove to derive its source from a very lofty range in that direction; whilst the Macquarie would be found still farther to the

eastward, in which quarter I must have deceived myself greatly, if we do not find a stream superior to the present; and my hopes in that respect are much strengthened when I consider that we are not above fifty miles in a straight line from the spot where Mr. Evans left the Macquarie, a strong and powerful stream, and that too in a season as long and even longer dry than the present one. In these hopes and expectations I shall continue an easterly course until nearly on the meridian of Bathurst, when they must either be realized, or the negative indisputably established, that there are no considerable rivers rising in the interior of New South Wales. From the hill on which we stood, bearings were taken to the most remarkable objects, which were but few; for the country, as far as the eye could reach, was a continued series of low grassy hills and valleys; the whole thinly covered with wood, and in many places entirely bare of it. The hills to the southward and south-west on the west side of the stream, and immediately bordering on it, were rocky and irregular; a few cypresses were growing on their sides and summits. We named the hill on which we stood Mount Elizabeth, and the extensive flats or plains north of it, and on the east side of the stream, M'Arthur's Plains.

The tracks of cattle were observed in various places on these plains, some very recent, perhaps not a month old. A fish was also caught, of the species common both to the Lachlan and the Macquarie. The soil of the country round, as far as we had time to examine it, was a rich, light, sandy loam, most abundantly covered with long broom-grass: the rocks and stones on the hills were granite of various qualities. Nothing was found new to the botanists; in truth, this is not a country adapted to their pursuits.

August 18.—In pursuance of the intention formed yesterday of still continuing an easterly course, we again set forward at half past eight o'clock.

The general description of country was nearly the same as that which we passed over on preceding days; several pieces of limestone were found, which proved of good quality. On going between three and four miles, ascending a range of hills which lay directly across our course, we had a prospect of a fine and spacious valley, bounded to the east by low grassy hills; there was every appearance of a watercourse being in it, but it was distant five or six miles, and our access to it was rendered difficult by lofty rocky hills forming deep and irregular

glens, so narrow that I feared we should not be able to follow their windings, the rocks rising in such vast perpendicular shapes as seemingly to debar our passage. After some little hesitation, we found a place down which the horses might descend in safety. This being accomplished, we traversed the bottom of the glen along all its windings for nearly three miles and a half: a fine stream of pure water was running through it. Here, doubtful of being able before dark to gain the valley we were in search of, we halted for the night. It is impossible to imagine a more beautifully romantic glen than that in which we lay. There was just level space on either side of the stream for the horses to travel along, the rocks rising almost perpendicularly from it to a towering height, covered with flowering acacia of various species, whose bright yellow flowers were contrasted and mingled with the more sombre foliage of the blue gum and cypress trees: several new plants were also found, of beautiful descriptions.

The stream in the glen running north-easterly encouraged us to hope that we should ultimately be rewarded by finding a considerable stream in the valley, which was the cause of our deviation from our more direct course to Bathurst. The glen which was to afford us access to it,

we named Glenfinlass: it might, perhaps, be properly termed the glen of many windings, as it was formed of several detached lofty hills; between each of which deep ravines were formed, communicating in times of rain their waters to this main one.

August 19.—Full of the hopes entertained yesterday, at half past eight o'clock we pursued our course down Glenfinlass. A mile and a half brought us into the valley which we had seen on our first descending into the glen: imagination cannot fancy anything more beautifully picturesque than the scene which burst upon us. The breadth of the valley to the base of the opposite gently rising hills was, between three and four miles, studded with fine trees, upon a soil which for richness can nowhere be excelled; its extent north and south we could not see: to the west it was bounded by the lofty rocky ranges by which we had entered it; this was covered to the summit with cypresses and acacia in full bloom: a few trees of the sterculia heterophylla, with their bright green foliage, gave additional beauty to the scene. In the centre of this charming valley ran a strong and beautiful stream, its bright transparent waters dashing over a gravelly bottom, intermingled with large stones, forming at short intervals considerable

pools, in which the rays of the sun were reflected with a brilliancy equal to that of the most polished mirror. I should have been well contented to have found this to be the Macquarie River, and at first conceived it to be so. Under this impression, I intended stopping upon its banks for the remainder of the day, and then proceeding up the stream southerly. Whilst we were waiting for the horses to come up we crossed the stream, and wishing to see as much of the country on its banks northerly, as possible, I proceeded down the stream, and had scarcely rode a mile when I was no less astonished than delighted to find that it joined a very fine river, coming from the east-south-east from among the chain of low grassy hills, bounding the east side of the valley in which we were. This then was certainly the long sought Macquarie, the sight of which amply repaid us for all our former disappointments. Different in every respect from the Lachlan, it here formed a river equal to the Hawkesbury at Windsor, and in many parts as wide as the Nepean at Emu Plains. These noble streams were connected by rapids running over a rocky and pebbly bottom, but not fordable, much resembling the reaches and falls at the crossing place at

Emuford, only deeper: the water was bright, and transparent, and we were fortunate enough to see it at a period when it was neither swelled beyond its proper dimensions by mountain floods, nor contracted by summer droughts. From its being at least four times larger than it is at Bathurst, even in a favourable season, it must have received great accessions of water from the mountains north-easterly; for from the course it has run from Bathurst, and the number of streams we have crossed all running to form it from the south and south-west, I do not think it can receive many more from that quarter between us and Bathurst, at least of sufficient strength to have formed the present river.

Reduced as our provisions were, we could not resist the temptation of halting in this beautiful country for a couple of days, to allow us time to ascertain its precise situation, and to ride down the banks of the river northerly as far as we could go and return in one day. The banks of the river in our neighbourhood were low and grassy, with a margin of gravel and pebble stones; there were marks of flood to the height of about twelve feet, when the river would still be confined within its secondary

banks, and not overflow the rich lands that border it. Its proper width in times of flood would be from six to eight hundred feet, its present and usual width is about two hundred feet. The blue gum trees in the neighbourhood were extremely fine, whilst that species of eucalyptus, which is vulgarly called the apple tree, and which we had not seen since we quitted the eastern coast, again made its appearance on the flats, and of large size; as was the camarina filifolia, growing here and there on its immediate banks.

The day throughout was as fine as could be imagined, and it was spent with a more cheerful feeling than we had experienced since we quitted the depot on the Lachlan. The river running through the valley was named Bell's River, in compliment to Brevet Major Bell, of the 48th Regiment; the valley Wellington Valley; and the stream on which we halted on Sunday, Molle's Rivulet.

August 20.—The day proved as favourable as could be wished, and the observations placed our situation in lat. 32. 32. 45. S., and our compared long. 148. 51. 30. E., the variation of the needle being 8. 38. 38. E. A valuable discovery was made in the course of the day by the men who were out with the dogs, the hills bounding the

east side of Wellington Vale being found of the purest limestone, of precisely similar quality with that found at Limestone Creek. We were never due north of that place, and it is more than probable that the same stratum extends on the same meridian through the country.

August 21.—At eight o'clock, accompanied by Mr. Evans and Mr. Cunningham, set out on our intended excursion down the Macquarie River. Crossing Bell's River in the valley, we came in a mile to where the steep rocky hills forming the west side of the vale advance their perpendicular cliffs directly over the river. These hills we soon rounded, and entered the vale north of them: I shall not in this place attempt to describe the rich and beautiful country that opened to our view in every direction. Alternate fine grazing hills, fertile flats and valleys, formed its general outline; whilst the river, an object to us of peculiar interest, was sometimes contracted to a width of from sixty to eighty feet between rocky cliffs of vast perpendicular height, and again expanded into noble and magnificent reaches of the width of at least two hundred feet, washing some of the richest tracts of land that can be found in any country; the banks were in those reaches low and shelving, and covered with

pebbles, whilst even at the highest floods secondary banks restrained the river from doing the smallest damage: these secondary banks might be from six to eight hundred feet in width, and I think the highest marks of flood did not exceed twenty feet perpendicular. The rapids were usually formed by small stony islands, which dividing the stream rendered it shoaler in those places than in others, but they never extended above one hundred yards, and were none of them fordable. Limestone of the best quality and of various species abounded; and it appeared to me to be as common as the other stone forming the hills, which was a fine and hard granite. We passed through this charming country for upwards of twelve miles, the course of the river during that time being nearly north, and from appearances we thought it must continue in that direction for a considerable distance farther. A perpendicular limestone rock overhanging the river terminated our excursion; adjoining to this rock (which was called Hove's Rock, from its being covered with a beautiful new species of hovia), a stratum of fine blue-slate was found. A little lower down, the bank on the east side was formed of perpendicular red earth cliffs at least sixty feet high, extending along the reach nearly three quarters

of a mile; this bank was named Red Bank: a fine grassy hill thinly covered with wood rose eastward of it.

The timber was unusually fine, consisting chiefly of very large and straight blue gums; beautiful large camarina trees were occasionlly growing at the very edge of the water. The tops and sides of the rocky precipices on the west side of Wellington Vale were clothed with cypress trees, which had all the appearance of the pinus silvestris, that adorns the mountains and glens of Scotland. It was nearly five o'clock before we returned to our tent, highly gratified with our day's excursion.

Nothing can afford a stronger contrast than the two rivers, Lachlan and Macquarie; different in their habit, their appearance, and the sources from which they derive their waters, but above all differing in the country bordering on them; the one constantly receiving great accession of water from four streams, and as liberally rendering fertile a great extent of country; whilst the other, from its source to its termination, is constantly diffusing and extenuating the waters it originally receives over low and barren deserts, creating only wet flats and uninhabitable morasses, and during its protracted and sinuous course is never indebted to a single tributary stream. The contrast

indeed presents a most remarkable phenomenon in the natural history of the country, and will furnish matter in other parts of this Journal, for such conclusions as my observations have enabled me to form.

August 22.—Among the other agreeable consequences that have resulted from discovering the river in this second Vale of Tempe, may be enumerated, as not the least, the abundance of fish and emus with which we have been supplied; swans, and ducks, were also within our reach, but we had no shot. Very large muscles were found growing among the reeds along some of the reaches; many exceeded six inches in length, and three and a half in breadth. Traces of cattle were found in various places as low as Hove's Rock, which are now doubtless straying through the country.

Our horses have recruited themselves exceedingly within the last ten days, and being lightly laden, I have great hopes of being enabled to reach Bathurst before our provisions are altogether expended; we have now left but four pounds and a half of flour, and the same quantity of pork per man; our chief dependence must be on the success of our dogs for any additional supplies, and in

such a country as the present, we have no fear of being in want of food.

We had scarcely laden our horses and began to proceed up the river, when the rain recommenced, and continuing without intermission, obliged us to halt after we had gone about six miles; which we did upon a reach of the river, that for magnitude and extent equals if not surpasses any in the Hawkesbury, and exceeds that much admired one on the Nepean River, winding round Emu Plains. The country on both sides was of the greatest possible fertility, and beautifully diversified by hills and open valleys. Timber is good, and in two places where the hills on this side nearly closed on the river, immense quantities of fine limestone were again found, the rocks being entirely composed of it. The rapids were few and unimportant, and occasioned as usual by the river dividing into two channels forming small islets. They did not appear to me to impede in any manner the navigation of the river; the open reaches had apparently depth to float the largest vessels, and there was certainly breadth sufficient for that purpose. Nothing in fact can be imagined grander or more beautiful than we have hitherto found

the river, and that too so near Bathurst that no reasonable expectation could have been formed of finding it such as we did. Many good specimens of agate forming on granite were found on the hills, chiefly where the limestone appeared in the largest and most continued stratum. We indulged ourselves in the probable speculation, that where limestone was found in such abundance as in this country, quarries of marble would also be discovered not far beneath the surface, as is usual in other countries most abounding in this useful stone. Fish and emus were procured in great quantities in the course of the afternoon.

August 23.—The last allowance of our provisions was now distributed, and at half past eight o'clock we proceeded up the river, which this day might be said to come through a mountainous country. Rocky points of hills frequently terminated on the river and occasionally opened into fine valleys and flats: in every valley a watercourse conveyed the waters from the back country to the river. I think the north bank was most frequently the lower: several small runs of water also fell in on that side. The hills, uniformly stony and rocky as they were, were covered

with good grass to their summits. The scenery on the river was beautifully picturesque, and more magnificent reaches cannot be found in any river; these were interrupted in their uniform course by rapids, which having a much greater fall than any we had seen lower down, would materially impede the navigation of the river by boats farther than this station, up to which point I conceive it navigable. No falls had yet been seen that boats could not easily pass over; but in seasons of greater drought than the present, some difficulty might be experienced.

The travelling was excessively bad along the sides and points of the hills; and as we had every reason to believe the country was much lower back from the river, I determined to quit its immediate banks, and endeavour to make a more direct course than we found it possible to do in following its windings, which, even if it were practicable, our provisions will not permit.

August 24.—A very thick fog arising from the river prevented us from setting forward until nearly ten o'clock, till when we could not see fifty yards in any direction. Taking the earliest opportunity to quit the river, we passed

through a mountainous tract of country extremely irregular and stony, but full of springs of water, and good grass. We found it impossible to accomplish more than eight or nine miles, the tops of the hills standing quite detached and unconnected into regular ranges. We seemed ascending the ranges, which in some measure separate the country farther westward from the river; as it was much lower in a direction from south-south-west to north-west, and appeared to be fine open grazing land. At four o'clock, we halted in a small valley for the evening. Our course made good on a variety of bearings was S. 6. W., seven miles.

August 25.—We again set forward, hoping soon to clear these lofty hills, among which we seemed to be entangled: four or five miles, on various courses, through a very rugged, but grassy country, freed us from the dividing range, as we found by the streams all running westerly, and apparently joining the river in Wellington Vale. Just before we descended what we considered the principal range, we saw Mount Lachlan bearing south from this point; and we were enabled for the remainder of the day to make a direct course towards Bathurst, through a good open grazing country of gentle hills and

dales, abounding in beautiful rivulets, having their rise in the mountains east of us, which bending round to the west and north-west, and watering the finest districts in their course, contribute their waters to the Macquarie.

The country now passed over was generally good, and although the hills were stony, yet the soil upon them was equal to the flats or valleys, and covered with grass. We saw no good timber, it consisting chiefly of small box trees, thinly scattered over the sides and tops of the hills. There was plenty of kangaroos, and our valuable dogs killed two fine ones.

Coarse gravel and small slate were the most common stones, but the bottoms of the rivulets were composed of a species of black jade. Quartz was very frequent.

Few traces of natives have been observed, either on the river, or since we quitted it. The population of this country must be extremely small: as the natives derive their chief support from opossums, squirrels, and rats, which are known to frequent barren scrubs and hollow trees, such neighbourhoods are unquestionably frequented by them in preference to the open country and river banks. It must be a mere accident that enables the natives to kill either a kangaroo or emu: as to fish,

they certainly are ignorant of the manner of taking them by hook and line.

August 26.—At eight o'clock we proceeded on our course towards Bathurst. The country throughout the day's journey was extremely hilly, with steep descents into fine valleys, in every one of which was a running stream. It appeared to me, that we were pursuing a course which, intersecting the streams near their sources, rendered our road much more irregular and difficult than it would have been either a few miles farther westward, or even on the immediate banks of the river, the line of which we several times saw during the day. The country north-east of the river was very elevated and broken. The tops and sides of even the most mountainous parts were covered with grass, and thinly clothed with wood.

Many of the valleys were composed of extremely rich soil: the hills were also generally good land and covered with grass; though there were occasionally barren stony summits, and ridges producing nothing but iron and stringy bark trees of diminutive growth. These tracts were however too inconsiderable in extent, to be considered other than what ought naturally to be expected in such an irregular tract as that which we travelled over.

Had not the appearance of the country round the Macquarie, where we first reached it, fully accounted for its magnitude, the course we have pursued since would satisfactorily have explained the cause; it is in point of fact a country of running waters: on every hill we found a spring, and in every valley a rivulet, either flowing directly north-east to the river, or taking a course westerly to join the river in Wellington Vale. Of the waters that may fall into it from the north-east we were of course ignorant, but the appearances of the country indicated that they were at least as numerous as from the south-west.

After proceeding a few miles, we halted for the night in an extensive valley, watered by a rivulet running through it directly to the river, from which I think we were distant six or seven miles.

August 27.—Nothing could be more delightful than the climate and the temperature of the season.

At eight o'clock we took our road through a very rugged and broken country. The glens were inclosed on either side by almost perpendicular rocks, mostly slate of fine quality, mixed with coarse granite. In these glens or defiles were fine running streams. The declivity and steepness of the road delayed our progress,

in seeking for better paths for the horses; and after riding a few miles we came to the edge of a very steep glen or valley, at the point of junction of two large streams, the largest coming from the south-west, the other from the north-west. Both united formed a very powerful stream, rushing with great impetuosity over a rocky bottom, with frequent falls or rapids. The hills being on both sides too steep even for the men to descend in safety, we were obliged to pursue the ridge of them up the north-west river, until we found a place where we could descend and cross, which we did about five o'clock in the afternoon with considerable difficulty. So steep indeed was the side on which we now were, that we could not find a level space sufficient to pitch our tent upon. The rocks consisted chiefly of slate and coarse granite intermixed. There appeared in each river to be more water than usual; and marks of flood were visible at a height exceeding eighteen feet.

Finding that we were entangled among the streams of the Macquarie, I determined on the morrow to proceed by the mountains dividing the north-west and south-west rivers; and if they should lead me considerably westward

before their junction, to cross the south-west river, which, from its apparent direction and vicinity to Bathurst, I considered to be the only stream of consequence which we should find between our present station and that place.

Rugged and uneven as the country generally was during this day's journey, there was considerable intermixture of the good with the barren; many portions consisting of excellent pasture land, and even the rocky hills were divested of the appearance of being so barren as they actually are, by being covered with shrubs and grass intermingled among the box and small gum trees, that find support between the interstices of the stones.

August 28.—At eight o'clock we proceeded on our journey, and pursuing the ridge which separated the two streams, we found that their general direction was from the southward, opening, as we advanced, into fine valleys, rounding gentle rising hills, thinly wooded and covered with grass. The ridge itself was chiefly of slate-rock, intermixed with masses of coarse siliceous granite. We followed the ridge for about six miles, when we descended into the valley through which the south-west rivulet ran, and after travelling about four miles farther, we crossed it

when it was running a strong stream. Waiting for the horses at this spot, I took the opportunity of ascending a very lofty conical hill, forming part of the range bounding the north-east side of the valley. From this hill our hopes and expectations were gratified by a view of Bathurst Plains, which I estimated to be distant about twenty-two miles, bearing on the course we were pursuing. A Journal is but ill calculated to be the record of the various hopes and fears, which doubtless in some degree pervaded every mind upon this intelligence: these feelings, whatever they might be, were soon to be realized, and in an absence from our friends and connexions of nineteen weeks how much might have occurred in which we were all deeply interested!

After travelling about three miles farther, we stopped for the evening, under expectations that we might possibly reach Bathurst on the morrow.

From the hill whence I saw Bathurst, the view in every direction (except north-east, where it was bounded by a range of equal height between me and the river) was very extensive; the country to the southward and south-west was broken into low grassy hills with

four intervening valleys. The rivulets derive their main supply from those hills, and from the range upon which we had travelled the greater part of the day: almost every hollow contained a running stream, having its source in springs near the summit of the hills.

Stringy bark trees were seen most generally on barren ridges, the larger sized blue gums in the valleys. In the evening the weather was unsettled with flying showers.

August 29.—At eight o'clock we proceeded towards Bathurst, hoping to reach it by the evening; this we effected between eight and nine o'clock, passing over a very hilly country with numerous running streams, joining the river near Pine Hill, and afterwards keeping along its banks.

The hospitable reception which we met with from Mr. Cox went far to banish all present care from our minds: relieved, as they were, by the knowledge that our friends were well, we almost forgot in the hilarity of the moment, that nineteen harassing weeks had elapsed since we last quitted it.

Although the winter at Bathurst, we learnt, had been cold and severe, there had not been much rain; little or

none had fallen in the depot on the Lachlan, although the people there had observed some very high floods in the river; one particularly that would nearly correspond with the time when an unexpected fresh surprised us on our return down the Lachlan on the 11th of July.

JOURNAL

OF AN

EXPEDITION IN AUSTRALIA.

PART II.

——— qua nulla pedum vestigia ducunt,
Nulla rotæ currus testantur signa priores. GROTIUS.

TO THE

RIGHT HON. ROBERT PEEL, M. P.

ONE OF HIS MAJESTY'S MOST HONOURABLE
PRIVY COUNCIL,

&c. &c. &c.

THIS JOURNAL

IS MOST RESPECTFULLY INSCRIBED,

BY HIS VERY FAITHFUL

AND OBLIGED

HUMBLE SERVANT,

THE AUTHOR.

Sydney, New South Wales,
July 21, 1819.

PREFACE.

THE general appearance of the country of New South Wales and the magnitude of the Macquarie River, as seen on the return of the expedition in 1817, had caused the most sanguine expectation to be entertained, that either a communication with the ocean, or interior navigable waters, would be discovered by following its course. The important benefits that would result to the colony in the event of such an expectation being realized, determined his Excellency Governor Macquarie to lose no time in fitting out a second expedition, which should have the elucidation of this point for its principal object. This expedition was also entrusted to my direction. I had scarcely a doubt of ultimate success, and set out with a confidence which nothing short of ocular demonstration could destroy. The result of our voyage down the Macquarie River, and the conjectures which naturally

arose in my mind founded upon observations of its apparent termination, together with our subsequent journey to the east coast, will be found in the following pages.

In the map which accompanies the present Journal, every bounding range to the westward is laid down, from which it will appear that the north-west interior is nearly a perfect plain; the lower parts of which are certainly in most seasons under water. The highest land we crossed lies in lat. 31. S., and long. 151. 10 E. From this apparently dividing or principal range, the country gradually declines to the north-west; when, the hills terminating abruptly, the level land commences, over which is discharged all the waters that have their rise in this dividing range; and also those waters which rising in the hills (for they cannot with propriety be termed mountains) to the south-west, have the Lachlan River for their channel.

The nature of the country will be best explained by a reference to the Journal; generally speaking, it is fine and open. The bounding high lands to the north-west seem to take a direction nearly parallel with the coast line, and the evident declension of the country northerly

affords strong ground for belief, that if those interior waters have any outlet to the sea*, it will be found in that direction; and I think the probability is that the waters falling westerly, will there approach the high tracts of country, much nearer than they do to the south-west. The whole country to the north of our track appeared so extremely open and practicable, that it offers in my opinion but few obstructions to a series of triangles being carried over it; the longest sides of which, being traced along the bounding high lands to the north-west, and carried as far northerly as the isthmus, which separates the gulf of Carpentaria from the sea to the eastward, would effectually set at rest all questions as to the existence of an interior sea. Farther north than this point, there can be no reasonable expectation of finding either waters or an outlet.

So few natives were seen in the interior, that those extensive regions can scarcely be described as inhabited; some scattered families comprise the entire population, and the scanty remarks we were enabled to make satisfied

* The observations made in the recent voyage of Lieutenant King along the west and north coasts preclude every reasonable hope of any opening being found on those coasts. The voyage which he is at present prosecuting will doubtless determine that point beyond all future question.

us of the strict identity of this race of human beings with those of the coast. The same method of procuring their food, the same arms and utensils, are common to both. This remarkable similarity in the natives of different tribes extends also to the animal and vegetable productions of the country: the eucalyptus and camarina; the kangaroo and the emu, with their various species, alike inhabit the cold regions of Van Diemen's land, and the warmer latitudes within the tropics.

A short description of the most remarkable plants collected during the expedition by Mr. Charles Frazier, the government collector, is added to this Journal; and although the result as to the principal object of the expedition has not been answerable to the expectation which was entertained when it set out, yet when the general knowledge obtained of so considerable a portion of this extensive country is considered, it is hoped that it has not been undertaken and performed in vain; and that the field which it has opened to the colonists will be attended with ultimate benefit both to them and to the parent country.

Sydney, July 17, 1819.

JOURNAL

OF AN

EXPEDITION IN AUSTRALIA.

PART II.

May 20, 1818. HAVING received his Excellency the Governor's instructions for the conduct of the expedition intended to examine the course of the Macquarie River, and every preparation having been made at the depot in Wellington Valley for that purpose, I quitted Sydney in company with Dr. Harris (late of the 102d foot), and after a pleasant journey arrived at Bathurst on the 25th. Our little arrangements having been completed by the 28th, we again set forward with the baggage horses and men that were to compose the expedition.

We at first kept nearly upon the track pursued by us on our return from the first expedition in August last; but on ap-

proaching Wellington Valley, keeping a little more to the westward, we avoided much of that steep and rugged road which we then complained of; the country being quite open, the valleys and flats good, the hills limestone rock. We did not meet with the slightest interruption, and arrived at the depot on the 2d of June, where we found the boats, &c. in perfect readiness for our immediate reception.

June 4.—Got all the horses and provisions over to the north side of the river, and made every preparation to pursue our journey on the morrow. The river rose about a foot during the day. The accident which had befallen our barometer during the former expedition not being repaired, we are of course deprived of means to make any observations on the height of the country above the sea, otherwise than by careful observation of the several falls or rapids: I do not think that our station here is much above four hundred feet below the level of Bathurst.

June 5.—About one o'clock the weather cleared up a little, when Lewis with the boat-builder's party set out on their return to Bathurst, taking with them three of the worst of the horses, and leaving with us nineteen. The river rose but little during the day: it is quite high enough for our purpose. A new species of fish was caught, having four smellers above and four under the mouth; the hind part of it resembled an eel; it had one dorsal fin, and four other fins, with a white belly; it measured

twenty-one inches and a half, and weighed about two pounds three quarters.

June 6.—Proceeded down the river about four miles, when the boats were finally laden. The river in Wellington Valley had been swelled by the late rains, insomuch that the water below its junction with the Macquarie was quite discoloured. From the fineness of the soil, the rain had made the ground very soft, rendering it difficult for the horses to travel.

June 7.—Proceeded on our journey, both boats and horses being very heavily laden with our stores and provisions. The river rose but little. Our day's journey lay generally over an open forest country, with rich flats on either side of the river: high rocky limestone hills ended occasionally in abrupt points, obliging the horses to make considerable detours. The hills were very stony, and so light was the soil upon them, that the rain rendered the ground very soft. The river had many fine reaches, extending in straight lines from one to three miles, and of a corresponding breadth. The rapids, although frequent, offered no material obstruction to the boats. The current in the long reaches was scarcely perceptible, and it appears to me that the difference of elevation between this station and the last is not considerable.

June 8.—The river expanded into beautiful reaches, having great depth of water, and from two to three hundred feet broad,

literally covered with water-fowl of different kinds: the richest flats bordered the river, apparently more extensive on the south side. The vast body of water which this river must contain in times of flood is confined within exterior banks, and its inundations are thus deprived of mischief. About six miles down the river, a freestone hill ended on the north side of the river: I mention this, as the only stone of that description I had yet seen. The trees were of the eucalyptus (apple tree), and on the hills a few of the cupressus macrocarpa* were seen: the trees would furnish large and useful timber. Between eight and nine miles lower, passed the mouth of Molle's rivulet, now a fine stream. At four o'clock halted for the evening on rather an elevated spot, overlooking the rivulet, and a most luxuriant country, on the south side of the river, well clothed with wood. The boats, during this day's work, met with no obstructions that were not easily avoided; the rapids were not so numerous, neither were they so shoal as in the vicinity of the depot. Our sportsmen provided us with plenty of kangaroos, and a swan.

June 9.—This day the river ran to the north-west by north; about six miles below our halting-place it received Mary's River, a pretty little stream. The country on the north side which we passed over was of various description; the hills barren and stony, with dwarf eucalypti, or gums, camarinæ, and a few of the ster-

* Callitr. Vent. decad.

culia heterophylla; the country hilly and open: some of the flats on the banks of the river were extensive and rich, and apparently not subject to floods. On the south side of the river, the country was more generally a rich flat, backed by distant hills; to the south-west, stony eminences occasionally ended on the river. On the hills many specimens of agate, iron-stone, and jasper were procured, also some flint; the low stones of the river produced the same: abundance of fine freestone was every where seen. The general elevation of the country still continues high; the river pours along a vast body of water; there is no fresh in it, and it is not in any respect above its usual level. The rapids are caused by the river dividing into two channels, forming small islands; the water here runs with great rapidity on a rocky and stony bottom, but of considerable depth; the obstructions solely arising from trees which have been washed by the floods from the banks, and which on the subsidence of the water have remained in the narrows. The character of this river is in every respect different from the Lachlan; its waters are pure and transparent, with no marks of flood; it derives its source and continuance from springs and additional streams, and is in no way dependent upon rains for its permanent existence.

June 10.—Remained at this station for the purpose of refreshing the people and horses. Examined the country to the north-east for a few miles; it differed but little from that already

passed over, in point of quality of soil, but was broken into irregular hills and valleys, without rising into any one distinguishing or remarkable hill: the surface of the country seemed elevated, and rising to the eastward. The soil for the most part a reddish light mould, the hills covered with small stones, the trees dwarf gum, box, a few cypresses and camarinæ; the soil well covered with grass. Kangaroos, fish, and swans, were the produce of this day's sport, so that we enjoyed all the necessaries, and many of the luxuries of life.

June 11.—Proceeded down the river about eight miles, meeting with no obstructions of any consequence: the water had risen about a foot in the last night, and now ran with considerable rapidity, particularly in the narrows. It is by no means desirable that the river should rise any higher; there is abundance of water for our purposes, any addition would only partially cover the stumps of trees and increase our danger; at present we see and avoid them. After travelling six miles we came to a small river running from the eastward; there was at this time a fresh in it, so that we had to unload the horses and use the boats to transport our baggage over. It was three o'clock before we had got every thing across, we therefore halted for the evening. The country passed through was of the finest description, and apparently equally good on the opposite side; rich flats bounded by gentle hills were on each side of the small river, which received the

name of Erskine River, after the present lieutenant governor of the colony. These flats were covered with the species of eucalyptus called apple tree, but (like the other trees) of small size. While we were employed in crossing the river, I rode up it about three miles through a similar country. I went to the north-east; the country gently rose, and was generally of an excellent soil, well watered and fit for all purposes of cultivation, with partial exceptions of stony and brushy ridges. Many hills and elevated flats were entirely clear of timber, and the whole had a very picturesque and park-like appearance. I hailed Erskine River as a good omen of ultimate success: it was the first stream we had met with falling from the eastward, and was a proof to me that the Macquarie was the natural reservoir or channel for the waters from the north-east, as I knew it to be from the south. We had as yet seen no inhabitants, and very few signs that the country is inhabited at all. Fish, flesh, and fowl are abundant, but there are no human beings to enjoy them but ourselves: native dogs are in considerable numbers, and keep up during the night a continual howling.

June 12.—We this day passed over a very beautiful country, thinly wooded, and apparently safe from the highest floods: the river had considerable windings, but was of noble width and appearance; the rapids were few, and offered no obstruction; its medium width from one hundred and fifty to two hundred and

fifty feet, and in many reaches much more. On one of the higher back ridges there are some good iron bark trees, with abundance of cypress; the apple, blue gum, and box, were the principal trees growing on the flats. Kangaroos were in very great numbers: our dogs took four; they were of that species called by Dr. Smith macropus elegans, and are very rare on the east coast. The stones and rocks were generally hard whinstone, or freestone, the former in large masses; the beach, of pebbles of all colours and kinds, from quartz to sandstone. About a mile from our resting-place, we passed the mouth of the small rivulet, named in the former journey Elizabeth's Burn; the stream now in it was inconsiderable.

June 13.—Our route during this day's journey was generally over a very level country, the land three or four miles back from the river very inferior to that on the borders of it, being covered with small trees and brush; the soil a light, red loam. The rich flats on the banks on either side were not flooded, and were of the best quality: these flats seemed more extensive on the south than the north side of the river, and were bounded by the fine hills, which were passed over on the return of the expedition last year. About five miles from our last night's resting-place, we fell in with a small rivulet from the north-east, which I named after Major Taylor, of the 48th regiment. On the west side of it, we came suddenly upon a couple of native families; they, however,

with the exception of an old man, and a boy who was up a tree, made their escape. No intreaties could bring the boy down; he seemed, in fact, as well as the old man, petrified with terror. The man was possessed of the remains of an iron tomahawk, which he had fitted as a mogo, or native axe. I think it probable he became possessed of this treasure through others of his countrymen who had visited the party in Wellington Vale, as it was clear he had never seen white people before. The man made repeated attempts to induce us to depart, which to his great joy we shortly did. The left side of this man's body was one continued ulcer, occasioned most likely by a burn. The river wound upon every point of the compass, and its breadth was much contracted by shoals and rapids running over a rocky bottom: the stream ran with great velocity, and the boat experienced no interruptions. The banks were very high and wide, and although the marks of flood were observed to upwards of thirty feet, the waters were confined to the actual bed of the river, without flooding the lands on either side. Large masses of coarse granite were in the river where we stopped for the evening; it was of a different species from any we had hitherto seen, and the bases of the hills ending on the river seemed to be composed of it.

June 14.—I had determined to halt this day, for the purpose of verifying our situation by survey, but was prevented by rain of

great violence throughout the day, accompanied by strong winds from the north-west; this confined us to our tents.

June 15.—Our journey lay over alternate rich flats and barren stony scrubs; the country irregular, and the banks much elevated: the land to the north-west and north, as far as we could see, (ten or twelve miles) broken into bare, irregular hills and valleys. On the south side of the river the flats were more extended; thick coppices, and tracts of barren land, were also observed on that side. About four miles down the river large blocks of granite were scattered in its bed, and formed the base of the surrounding hills, the tops of which were covered with different kinds of stone, cemented or fused together by the action of fire: many of those stones were beautifully crystallised, and the appearance of some kind of mineral was evident. The river sometimes swept along in fine reaches, then, becoming contracted into narrow rocky channels, rushed through those straits with extreme violence, rendering it difficult to steer the boats clear of the obstructions that presented themselves on every side: the large boat struck twice in those narrows. The water has fallen considerably, and it does not appear to be even now at its usual level; its quality is very hard. The granite we fell in with four miles below our last encampment was of a totally different species, being much finer and closer grained, with small black specks thickly intermingled in the mass; some freestone was also

seen. The botany of the country was in all respects the same as observed on our journey homewards last year; the grassy nature of the herbage preventing any material addition to our collection. Kangaroos were in great numbers, and continued to furnish us with a welcome addition to our rations.

June 16.—Our day's route was as usual over a very flat though rich country, thickly wooded with good timber of the eucalyptus and angophora species, with some fine cypresses in the looser soils, and back from the river. The country, although flat, appears considerably elevated, and is neither flooded nor swampy; the opposite side apparently of the same kind. We fell in with another small camp of natives; the women and children withdrew before we came up with them: among the men (seven in number) we recognised four whom we had seen on the last expedition at Mary's Rivulet; the recognition was mutual, and they seemed highly pleased with it: they accompanied us about eight miles farther to our evening's encampment, where being gratified with some kangaroo, and undergoing the operation of shaving, (at their earnest request, after seeing one of their number disencumbered of an immense beard) they left us at sunset to join their families, which were probably at no great distance. About four miles above our encampment, on the immediate banks of the river, we discovered a large mass of saponaceous earth; I at first took it to be a fine pipeclay, but on

examination, it appears to possess all the valuable qualities of fuller's earth; and a piece of woollen cloth being partially greased, and then rubbed over with the earth, the grease was perfectly extracted and the cloth left entirely clean. Among this earth, small white pieces of a hard marly substance were found, and appeared either to be pure lime, or to contain a very considerable portion of it. On one of the beaches a small shell was found, which was unanimously adjudged to be a marine production; at least, we had never before seen any fresh-water shell resembling it. The river fell during the last night and the course of this day very considerably, and is, I think, below its proper level; there is however an ample sufficiency of water for our boats: the chief dangers are from stumps and branches of trees in the narrows; and what previously to the great fall in the water we could have passed over without difficulty, now occasions us some anxiety and trouble. The course the river took to-day was considerably to the north.

June 17.—A very severe frost, the ice a quarter of an inch thick. About a mile down the river, we saw a native burial-place or tomb, not more than a month old; the characters carved on the trees were quite fresh: the tomb had no semicircular seats, but in other respects was similar to those seen on our last journey. The country still continued perfectly level, the greater part extremely good and rich; back from the river it was occa-

sionally marshy, with barren rocky scrubs; the timber large, and generally good: we could not see beyond a mile on the opposite side, but the country there appeared much the same. One of the men, who was some distance ahead of the horses, saw a large party of the natives, who fled at his approach, and swam the river; there were upwards of twenty men, besides women and children: the moment they were safely across, they brandished their waddies and spears in token of defiance: this was the first time any of the natives were seen armed, or in any way hostilely inclined. The river ran to the north-west by north over a bottom of rock and sand: in point of depth, it was amply sufficient for much larger boats than ours; but it was impossible always to avoid concealed dangers, over which the waters did not cause the slightest ripple. The large boat struck on a sharp rock, and with such violence as to stave her bottom; she was immediately unladen, and temporarily repaired without injury to the cargo. Although the river is extremely low, there is a very large body of water in it; the outer banks are nearly a quarter of a mile wide, and far out of the reach of flood, the marks of which were, to our extreme astonishment, observed nearly fifty feet high. We have not seen during these last two days any hill or other eminence; the country within our sight and observation being perfectly level.

June 18.—As we were on the point of setting forward, a

large party of natives made their appearance on the opposite side of the river: they set up a most hideous and discordant noise, making signs, as well as we could understand them, for us to depart and go down the river. After beating their spears and waddies together for about a quarter of an hour, accompanied by no friendly gestures, they went away up the river, while we pursued our course in an opposite direction. We had hitherto met with no obstructions in the navigation, except such as arose from the wrecks of successive floods lodging in the narrows; these were easily overcome: the course of the river to-day for nearly six miles was a fine and even stream, from forty to fifty yards wide, and from eight to sixteen feet deep, over a bottom of rock and sandy gravel; when a reef of rocks at once interrupted our progress in the laden boats, the water breaking with such violence over them, that I was afraid they would be greatly endangered even when light. The horses had stopped at a cataract about three quarters of a mile lower down, and it appeared that the rocky shoal extended to that distance, when a fall of five feet over a bed of rocks would have stopped the boats altogether. The horses were immediately unladen and sent to bring the cargos of the two boats, which being accomplished, we got them safely over the shoals by the cataracts; when hauling them over land about two hundred yards, they were again launched into deep water. The country on either side during this day's journey was by no

means so good as it had hitherto generally been, being very brushy, and thickly timbered, chiefly with the species of eucalyptus called box, and another kind appearing to be different from those frequently observed. The banks of the river were very high; and, notwithstanding the country was perfectly level, it was far above the reach of any flood. The body of water falling over the cataract was surprising, the low state of the river being considered, and this incident instead of discouraging us increased our already sanguine hopes, that its termination would not deceive the expectations we could not avoid indulging.

June 19.—The boats during their progress this day did not experience any obstruction, the river winding in fine though narrow reaches, over a bottom of sand and occasionally rock; the depth from eight to sixteen feet. The country still continued perfectly level, but generally of excellent soil: two or three miles back from the river north-east, there were several extensive plains, without any timber on them, and in many places water was on the surface, probably occasioned by the heavy rain on the 14th instant; since these flats, and indeed all the country we had hitherto travelled over, were quite clear of any floods from the river. The banks of the river are, I think, ten or twelve feet lower than they are fifteen or twenty miles higher up; the floods evidently do not rise to so great a height, not exceeding, as far as we can judge, sixteen feet. I do not think the timber is either so large or so good as we had hitherto found it; but there is a great

quantity of it, chiefly box, and a species of blue gum. Although at such a distance from the Lachlan, we have recognised most of the plants found in its vicinity: in all other respects the neighbourhood of the two rivers is totally dissimilar; and in nothing more observable than in the rivers themselves. The water in the river continues so extremely hard as to render it difficult to raise a lather from soap; it is also very pure and transparent.

June 20.—The night cold, a sharp frost congealing some standing water by the river's side. The river rose upwards of a foot during the night, and still continues gradually to rise. Having gone upwards of one hundred and twenty-five miles from Wellington Valley, I thought it advisable that the two men who accompanied us for that purpose should return to Sydney with an account of our proceedings, agreeably to the governor's instructions. Despatched two other men on horseback to the north-east, with directions to go as far as possible in that direction, and to return by sunset; which they did, and reported that they had been from fourteen to sixteen miles, through a very fine though level country: the brushes were of small extent, and communicated with the finest tracts, chiefly of forest land thinly wooded: no marks were seen of any floods either from the river or land side, and these flats were watered by chains of ponds or watercourses, which doubtless when overflowed communicate with the river. Abundance of kangaroos and emus.

June 21.—The result of the observation this day gave for

our situation lat. 31. 49. 60. S., long. 147. 52. 15. E., and the variation 8. 22. E.

June 22.—Completed the necessary papers for the governor's information, and made all ready to proceed on our journey to-morrow. The river in these last two days has risen between two and three feet.

June 23.—Having despatched Thomas Thatcher and John Hall to Bathurst, with an account of our progress, the expedition set forward down the river. For four or five miles there was no material change in the general appearance of the country from what it had been on the preceding days, but for the last six miles the land was very considerably lower, interspersed with plains clear of timber, and dry. On the banks it was still lower, and in many parts it was evident that the river floods swept over them, though this did not appear to be universally the case. The far greater part of the last six miles was covered with shrubs, and the acacia pendula. These unfavourable appearances threw a damp upon our hopes, and we feared that our anticipations had been too sanguine. The river continued nearly as before, but much narrower, and more winding, in some measure accounting for the great height of the floods which we observed fifty or sixty miles back, where the river was probably four times as wide: we missed with regret the striking characteristics which had hitherto distinguished it, the sandy and gravelly beaches, and rocky

points; though there was certainly the same volume of water which had originally given me such strong hopes that it could never be dissipated over marshes. The banks are no more than twenty feet high in their most elevated places, and the probability is, that all our doubts, speculations, and hopes, will be clearly decided within the week; the soil is of the richest quality, but the flatness of the land, and want of any eminence, are great drawbacks upon the bounties of nature: not but there are numerous spaces above the reach of either land or river flood, which would offer secure retreats to the inhabitants of these singular regions. Several new birds were seen to-day of very beautiful plumage; none however were procured, so as to enable me to describe them. We also saw the crested pigeon, and gray and red parrot of the Lachlan; some fine and singular plants also enriched our collection: it would seem as if nature here delighted in wasting her most beautiful productions upon the "desert air," rather than placing them in situations where they would become more easily accessible to the researches of science and taste.

June 24.—The country was still extremely flat, and perfectly overrun with acacias, dwarf box (eucalyptus), some species of suffruticore atriplex*, and other shrubs; and intersected by nu-

* Other genera of chenopodeæ likewise exist on these plains, of which some salsolæ, and that curious lanigerous shrub sclerolæna paradoxa of Mr. Brown, with spinous fruit, are most remarkable.

merous extensive lagoons now quite dry, but which when the river is about one-third full, convey the water back over vast plains and levels for the most part clear of every kind of brush, and on the fall of the waters these lagoons act as drains to the lands. The brushes were most numerous and perplexing in the neighbourhood of the river, a course we were obliged to keep, in order not to part company with the boats. The country two or three miles along the banks of the river was only partially flooded, the land being much lower at a greater distance from it; the most part of the soil was a rich, alluvial deposition from floods. Except on those clear plains which occasionally occurred on the sides of the river, we could seldom see beyond a quarter of a mile. Byrne, who was at the head of the hunting party, surprised an old native man and woman, the former digging for rats, or roots, the other lighting a fire: they did not perceive him till he was within a few yards of them, when the man threw his wooden spade at Byrne, which struck his horse; then taking his old woman by the hand, they set off with the utmost celerity, particularly when they saw the dogs, of which they seem to entertain great fears. In the evening, natives were heard on the opposite side of the river, but none came within view. There was no alteration in the appearance or size of the river during this day's course; the banks were in no respect lower: it ran with great rapidity over a sandy bottom, and was from six to thirty feet deep; the water still clear, and remarkably hard.

June 25.—The weather cold, but fine: the thermometer is about 28 degrees, and I think from this extraordinary degree of cold so far to the north, that notwithstanding the lowness of the surrounding country (as compared to its relative situation with the river), that we are still at a considerable elevation above the sea. In our last journey, three degrees farther south, we experienced at the same season no such cold, the weather being equally fine and clear as at present. The appearance of the country was much the same as yesterday; the whole ground we passed over being liable to flood, and covered with eucalyptus or gum tree, acacia pendula, and various other species of that extensive genus, one of which appeared quite new but not in flower. Four or five miles back from the river (east), the country rises and is not flooded, the soil being there much inferior, but covered with fine cypresses: notwithstanding this tract was much higher than that more immediately on the river, there was no eminence from which we could look around. The banks of the river are much lower than yesterday, scarcely exceeding twelve feet high; the floods are low in proportion, and I did not see any mark showing that the rise of water ever exceeded a foot above the banks. The river did not offer the slightest obstruction, and was from twenty to twenty-four feet deep. There is probably from two to three feet more in it than usual; the breadth varies considerably, in some places not more than sixty feet, in others two hundred. All the lagoons (though very deep), in the neighbourhood of the

river are quite dry, and appearances indicate that the country has not been flooded for years. Emus and kangaroos are in abundance; but we have lately caught no fish, owing most likely to the coldness of the weather: various birds altogether unknown to us were seen; and although the leading plants were the same as those found through nearly the whole of Australia, new ones were daily met with. The river has continued inclining to the northward: its course to-day was north north-west.

June 26.—The country this day was as various as can be imagined; low but not level; in some places covered with the acacia pendula, chenopodeæ, and polygonum juncium; in others, with good gum and box trees. The whole, with few exceptions, appeared liable to flood. Four or five miles back the country imperceptibly rises, and is free from river floods; but the hollows, proceeding from the inequalities of its surface, are in rainy seasons the reservoirs of the land floods. The whole country was now perfectly dry, and must have been so for a long period: it would indeed have been impossible, had the season been wet, to have kept company with the boats. The river itself continues undiminished, and is a fine stream, with nothing to impede the navigation; its windings, however, are very considerable. The banks appear lower by nearly three feet than yesterday: there are still no marks of flood rising upon the land above a foot on either side: the depth of the stream is from twenty to twenty-four feet,

breadth from sixty to one hundred and sixty, and its current is about a mile and a half per hour. The river has fallen yesterday and to-day nearly eighteen inches.

June 27.—The river continues to fall. We had gone about five miles through a country as low and brushy as usual, when we were agreeably surprised with the view of a small hill about a mile to the eastward: we hastened to it, in hopes that we should find that the country rose to the north-east; we however saw nothing but another hill still higher, about three miles to the north north-west, in the direction of the river. The hill, or rather rock, we had just quitted, was about a quarter of a mile long by half a quarter broad, and about seventy feet high; it was nothing but granite, having the sides and summit covered with broken pieces of a fine and very compact species of the same mineral. We named it Welcome Rock; for any thing like an eminence was grateful to our sight. From the summit of the hill seen to the north north-west our view was very extensive; but nothing indicated either a speedy change of country or a termination of the river. To the westward, the land was a perfect level, with clear spaces or marshes interspersed amidst the boundless desert of wood. To the east, a most stupendous range of mountains, lifting their blue heads above the horizon, bounded the view in that direction, and were distant at least seventy miles, the country appearing a perfect plain between us

and them. From north-west to north-east nothing interrupted the horizontal view, except a hill similar to the one we were on, about five miles distant to the north north-west. Extended as was our prospect, it did not afford much room for satisfactory anticipation; and there was nothing that gave us reason to believe that any stream, either from the east or west, joined the river for the next forty miles at least. The hill from which this view was taken was named Mount Harris, after my friend, who accompanied the expedition as a volunteer; that to the north north-west, Mount Forster, after Lieutenant Forster, of the Navy; and the lofty range before mentioned to the eastward was distinguished by the name of Arbuthnot's Range, after the Right Hon. C. Arbuthnot, of His Majesty's Treasury. The two first mentioned hills are entirely of granite, from one and a half to two miles long, by half a mile to one mile wide: their formation must be considered a most singular geological phænomenon, detached as they are by an immense space from all mountainous ranges, and rising from the midst of a soft alluvial soil. Small pieces of granite were in several places thrown into heaps, as if by human means; and their whole surfaces were covered with similar pieces, detached from the solid mass to which they had once belonged. If I might hazard a conjecture, I should attribute to them a volcanic origin: I think, on examination, their constituent parts will be found to have undergone the action of fire, by which they

have been fused together. To those conversant in the structure of the earth, and with the means used by nature to accomplish her purposes, these singular hills may offer a subject for curious inquiry. The natives appear numerous in these regions of apparent desolation: we fell in with several parties in the course of the day, in the whole probably not less than forty, and many fires were seen to the north. Being a mile or two a head of our party in a thick brush, I came suddenly upon three men; two ran off with the greatest speed; the third, who was older and a little lame, first threw his firestick at me, and next (seeing me still advance) a waddie, but with such agitation, that though not more than a dozen paces distant, he missed both me and my horse. I returned to my party, and in company with them surprised the native camp; we found there eight women and twelve children, just on the point of departing with their infants in their clokes on their backs: on seeing us, they seized each other by the hand, formed a circle, and threw themselves on the ground, with their heads and faces covered. Unwilling to add to their evident terror, we only remained a few minutes, during which time the children frequently peeped at us from beneath their clothes; indeed, they seemed more surprised than alarmed: the mothers kept uttering a low and mournful cry, as if entreating mercy. In the camp were several spears, or rather lances, as they were much too ponderous to be thrown by the arm; these were jagged: there

Drawn by Major Taylor from a Sketch by Mr. Evans.

T. Clark Sculpt.

ARBUTHNOT'S RANGE, from the WEST.

London, Published by J. Murray, 1810.

were also some elamongs (shields), clubs, chisels, and several workbags filled with every thing necessary for the toilet of a native belle; namely, paint and feathers, necklaces of teeth, and nets for the head, with thread formed of the sinews of the opossum's tail for making their clokes. The men belonging to the camp were heard shouting at no great distance: their affection for their families was not, however, sufficiently powerful to induce them to attempt their rescue from the hands of such unfabulous centaurs, as we doubtless appeared to them. The boats met with no interruption, the river continuing a fine and even stream, running at the rate of a mile and a half per hour: it was in places very narrow, and our astonishment would have been excited that such a channel should contain the powerful body of water falling into it, if we had not found its medium depth to be from twenty to thirty feet. The height of the banks is not more than seven feet above the water, and they appeared to have been flooded to that height. It did not seem that back from the river, beyond three or four miles, the country was ever flooded, except by the waters which would fall on its surface in rainy seasons; it was, however, now quite dry, and the hollows of the surface bore evidence of a long continued drought. The course of the river still continued to the north north-west. The rocks composing Mount Harris are apparently basaltic, the whole seeming to have been shot up in points, the angles of which are

complete. The stones are very heavy and compact, and when dashed against each other were extremely sonorous.

June 28.—Remained here this day for the purpose of rest and refreshment: the grass and country poor, and covered with acacia trees and small eucalypti in our immediate vicinity. Despatched two men to view the country to the north-east. The botanical collector crossed the river and ascended Mount Forster, on which he was fortunate enough to procure many plants seemingly new: he thought he saw a branch of the river separating from it and running to the north-west, whilst the river itself continued to go northerly. The account brought by the men in the evening was far from flattering; they had been out ten or twelve miles to the north and east, and found the country as bad as can be imagined; in fact, a dry morass, with higher land, free from floods, but overrun with brushes, among which a few pines were scattered: they saw no water, and but little game of any kind.

June 29.—As we proceeded down the river, the country gradually became much lower in its immediate vicinity; and between four and five miles from our resting-place it was even with the banks, and in some places overflowed them. All travelling near the river with horses was at once interrupted, and this was the more perplexing as it rendered the communication with the boats uncertain, and liable to be cut off altogether. Finding that those marshes were only impassable for a mile or little more from the

river, and that occasionally we could approach within one hundred yards of it, the horses were directed to keep round the edge of them, making for the river whenever practicable, and firing guns to let the boats know our situation. At two o'clock in the afternoon we stopped, after going about ten miles and a half, about one hundred and fifty yards from the river, which we could not approach nearer by reason of wet and boggy marshes; in fact, the place where we stopped is of the same description, but now (fortunately for us) dry. The country north-east of us, along the dry edge of which we were obliged to keep, is as bad as possible, being in wet seasons full of water-holes, and consequently impassable. The river still continues undiminished, as we find that the branches and small streams that frequently run from it join it again at short distances, and that they owe their existence at this time to the full state of the river, which is certainly some feet above its usual level. The breadth and depth of the river were various throughout the day: in the places where it overflowed its banks, there was not more than from ten to twelve feet; in others, where it ran very broad, but was confined within them, fifteen feet; and in narrower places, under the same circumstances, upwards of twenty feet. Thus it seemed to vary with the capacity of the channel to contain its waters, which were very muddy, the current running at a medium rate of a mile per hour. The boats arrived at about half past four o'clock, meeting nothing to interrupt them.

June 30.—After making every arrangement that we could devise to ensure our keeping company with the boats, we proceeded down the river. Our progress was, however, interrupted much sooner than I anticipated; for we had scarcely gone six miles, and never nearer to the river than from one to two miles, when we perceived that the waters which had overflowed the banks were spreading over the plains on which we were travelling, and that with a rapidity which precluded any hope of making the river again to the north-west by north, in which direction we imagined it to run for some distance, when its course appeared to take a more northerly direction. Our situation did not admit of hesitation as to the steps we were to pursue. Our journey had, in fact, been continued longer than strict prudence would have warranted, and the safety of the whole party was now at stake: no retreat presented itself except the station we left in the morning, and even there it was impossible that we could, with any regard to prudence, remain longer than to carry the arrangements which I had in contemplation into effect. The horses were therefore ordered back, and two men succeeded, after wading through the water to the middle, in making the river about three miles below the place they set out from. Fortunately the boats had not proceeded so far, and on their coming up were directed to return. The boats arrived at sunset, having had to pull against a strong current. The river itself continued, as usual, from fifteen to twenty-five feet deep, the waters which were overflowing the

plains being carried thither by a multitude of little streams, which had their origin in the present increased height of the waters above their usual level. The river continued undiminished, and presented too important a body of water to allow me to believe that those marshes and low grounds had any material effect in diffusing and absorbing it: its ultimate termination, therefore, must be more consonant to its magnitude. These reflections on the present undiminished state of the river would of themselves have caused me to pause before I hastily quitted a pursuit from the issue of which so much had naturally been expected. For all practical purposes, the nature of the country precluded me from indulging the hope, that even if the river should terminate in an inland sea, it could be of the smallest use to the colony. The knowledge of its actual termination, if at all attainable, was, however, a matter of deep importance, and would tend to throw some light on the obscurity in which the interior of this vast country is still involved. My ardent desire to investigate as far as possible this interesting question, determined me to take the large boat, and with four volunteers to proceed down the river as long as it continued navigable; a due regard being had to the difficulties we should have to contend with in returning against the stream. I calculated that this would take me a month; at all events, I determined to be provided for that period, which indeed was the very utmost that could be spared from the ulterior object of the expedition.

July 1.—The water not rising. Employed in making every preparation to proceed on the voyage down the river to-morrow morning. On mature deliberation, it was resolved that on my departure, the horses with the provisions should return back to Mount Harris, a distance of about fifteen miles, as the safety of the whole would be endangered by a longer stay at this station, and to that point I fixed to return with the large boat. It was determined, that during my absence Mr. Evans should proceed to the north-east from fifty to sixty miles, and return upon a more northerly course, in order that we might be prepared against any difficulties that might occur in the first stages of a journey to the north-east coast. The only one which I contemplated in a serious point of view, was the probable want of water until we came in contact with high land, and I hoped this might be partially provided against by Mr. Evans's expedition. The horses were all in good condition, and, from the length of time I expected to be absent, the baggage would be reduced to the smallest possible compass, and the cooper would have time to diminish the pork casks, which were far too heavy for the horses, being intended for boats only; for it had not been contemplated that the nature of the country would so soon deprive us of water carriage.

July 2.—I proceeded down the river, during one of the wettest and most stormy days we had yet experienced. About twenty miles from where I set out, there was, properly speaking, no country; the river overflowing its banks, and dividing into

streams which I found had no permanent separation from the main branch, but united themselves to it on a multitude of points. We went seven or eight miles farther, when we stopped for the night upon a space of ground scarcely large enough to enable us to kindle a fire. The principal stream ran with great rapidity, and its banks and neighbourhood, as far as we could see, were covered with wood, inclosing us within a margin or bank. Vast spaces of country clear of timber were under water, and covered with the common reed*, which grew to the height of six or seven feet above the surface. The course and distance by the river was estimated to be from twenty-seven to thirty miles, on a north north-west line.

July 3.—Towards the morning the storm abated, and at day-light we proceeded on our voyage. The main bed of the river was much contracted, but very deep, the waters spreading to the depth of a foot or eighteen inches over the banks, but all running on the same point of bearing. We met with considerable interruption from fallen timber, which in places nearly choked up the channel. After going about twenty miles, we lost the land and trees: the channel of the river, which lay through reeds, and was from one to three feet deep, ran northerly. This continued for three or four miles farther, when although there had been no previous

* Arundo phragmites. *Linn.*

change in the breadth, depth, and rapidity of the stream for several miles, and I was sanguine in my expectations of soon entering the long sought for Australian sea, it all at once eluded our farther pursuit by spreading on every point from north-west to north-east, among the ocean of reeds which surrounded us, still running with the same rapidity as before. There was no channel whatever among those reeds, and the depth varied from three to five feet. This astonishing change (for I cannot call it a termination of the river), of course left me no alternative but to endeavour to return to some spot, on which we could effect a landing before dark. I estimated that during this day we had gone about twenty-four miles, on nearly the same point of bearing as yesterday. To assert positively that we were on the margin of the lake or sea into which this great body of water is discharged, might reasonably be deemed a conclusion which has nothing but conjecture for its basis; but if an opinion may be permitted to be hazarded from actual appearances, mine is decidedly in favour of our being in the immediate vicinity of an inland sea, or lake, most probably a shoal one, and gradually filling up by immense depositions from the higher lands, left by the waters which flow into it. It is most singular, that the high-lands on this continent seem to be confined to the sea-coast, or not to extend to any great distance from it.

July 7.—I returned with the boat late last night, and was

glad to find that every thing had been removed to Mount Harris. Mr. Evans had not yet set out on his journey, but intends to do so to-morrow.

July 8.—Mr. Evans set forward to the north-east, taking with him eight or ten days' provisions, which I hoped would be sufficient to enable him to form a competent idea of the country we should now have to travel over. In the mean time we employed ourselves in diminishing our baggage, and setting aside eighteen weeks' provisions on a reduced ration, which was the utmost the horses could take; the remainder serving us for consumption during our stay here.

July 18.—During the last week the weather was very variable and unsettled, with constant gales from the north-west round to the south-west, and occasional heavy rain. We had reason to congratulate ourselves on the change of our situation: a delay of a few days would have swept us from the face of the earth. On the 10th, the river began to rise rapidly, and on the 15th, in the evening it was at its height, laying the whole of the low country under water, and insulating us on the spot on which we were; the water approaching within a few yards of the tent. Nothing could be more melancholy and dreary than the scene around us; and although personally safe, we *could not* contemplate without anxiety the difficulties we might expect to meet with, in passing over a country which the waters would leave wet and marshy, if

not impracticable. By this morning the waters had retired as rapidly as they had risen, leaving us an outlet to the eastward, though I feared that to the north-east the waters would still remain. In the evening Mr. Evans returned, after an interesting though disagreeable journey. His horses were completely worn out by the difficulties of the country they had travelled over. His report, which I shall give at length, decided me as to the steps that were now to be pursued; and I determined on making nearly an easterly course to the river which he had discovered, and which was now honoured with the name of Lord Castlereagh. This route would take us over a drier country, and the river being within a short distance of Arbuthnot's range, would enable me to examine from those elevated points the country to the north-east and east; and to decide how far it might be advisable to trace the river, which it is my present inclination to do as long as its course continues to the eastward of north. From Mr. Evans's Journal, it will be perceived that the waters of the Macquarie have flowed to the north-east, and still continued flowing among the reeds, which forced him to alter his course. The circumstance of the river and other large bodies of water crossed by Mr. Evans all flowing to the north, seems to bear out the conclusion that these waters have but one common reservoir.

July 19.—A tempestuous night, with thunder, lightning, and rain. Impressed with the important use we should be able to

make of our boats, it was determined to construct a carriage for the small one, which we did by the afternoon. Our labour was wasted; for we were altogether unable to contrive any harness by which the horses could draw it: we were therefore reluctantly obliged to relinquish our intention.

July 20.—The morning was fine; and after much contrivance, we succeeded in taking with us whatever was essential to our future security, and the whole of the provisions except two casks of flour. The horses were, however, very heavily laden, carrying at least three hundred and fifty pounds each; a weight which I was fearful the description of country we had to pass over would render still more burthensome. We had, however, relinquished every thing that was not indispensable, and the saddle horses were equally laden with the others. Mount Harris, under which we had remained for the last fortnight, is in lat. 31. 18. S. long. 147. 31. E. and variation 7. 48. On the summit of the hill we buried a bottle, containing a written scheme of our purposed route and intentions, with some silver coin. Our course during the day was east by north, by compass, over a level country intersected with marshes, over which the horses travelled with the utmost difficulty, and not without repeated falls. Considering how heavily they were laden, I was unwilling to press them at this early period of our journey, and halted after going seven miles on the above course. From Mount

Harris, bearings were taken to the most remarkable elevations in Arbuthnot's Range, as follows:

Mount Exmouth, (northern extreme of the range)	N. 79. E.
Mount Harrison, (centre)	N. 85. E.
Vernon's Peake	N. 88. E.

July 21.—Proceeded on the same course, through a country of alternate brush and marsh: whatever obstacles the former opposed to the progress of the horses, were nothing to the distress occasioned by the latter, in which they sank up to their knees at every step; I could not suffer them to proceed farther than seven miles, which, indeed, was not accomplished without severe labour. It is a singular feature in this remarkable country, that the botany and soil are in all respects the same as two hundred and fifty miles farther to the south-west, presenting nothing new to our researches. Passed a very large chain of ponds now running to the north-east, and named them Wallis's Ponds, after my friend, Captain Wallis, of the 46th regiment.

July 22.—We passed over much the same country as yesterday, but having a large proportion of cypress forest. After travelling nearly ten miles, we halted on the edge of a very extensive flat, from three to four miles in diameter, covered with water. From this plain we had an excellent view of Arbuthnot's Range, which, from so low and level a country, appears of vast height. The

horses failed much during the day, and several of them were severely wrung with their burthens.

July 23.—The weather continues remarkably fine and favourable to our progress over these plains. Our course to-day was chiefly through a thick brush of acacia and cypresses; a few trees of the eucalyptus and camarina were intermixed. The marshy ground was not so frequent, and we effected between eight and nine miles, when we stopped on a small chain of ponds but now a running stream, doubtless having its rise in the marshy grounds a few miles south of us: its course was to the north. We saw and shot several unknown birds within these few days, but the botanical sameness continues. These ponds were named Morrissett's Ponds, after Capt. Morrissett, of the 48th regiment.

July 24.—About a mile and a half from last night's station, we crossed another small stream similar in all respects to Morrissett's Ponds. Our course was alternately over wet flats and dry brushes; but in the latter we met with difficulties which we did not anticipate, namely, dry bogs of a most dangerous description; they are from thirty to forty yards broad, and the apparent firmness of their surface treacherously conceals the danger beneath. One was discovered before the horses were too far advanced to retreat, and by unlading them, we passed safely over. The horses were upon the other before we discovered the extent of our danger, and it was only by instantly cutting away their

loads and harness, and by the exertion of all hands, that they were dragged out; but they were so exhausted by the struggles they had themselves made, that I found it would be highly imprudent to proceed farther, though we had only gone five miles and a half. Such of the horses as had not come up, their loads being carried over, crossed the bog half a mile higher, where the ground was somewhat firmer. We had this day the misfortune to find two of our horses much strained in their hind quarters. The soil of the brushes is in general a light, sandy loam; on the plains it is an alluvial mould, on a substratum of clay: the water on these plains is seldom deeper than the ankles, but travelling over them is very wearisome. Arbuthnot's Range was in sight during the whole day. The country was so generally level, that it was impossible to discern any inequality in it. The waters, however, ran with a pretty brisk stream northerly.

July 25.—At nine o'clock we set forward with anxious hopes of reaching Castlereagh River in the course of the day; we struggled for nine miles through a line of country that baffles all description: we were literally up to the middle in water the whole way, and two of the horses were obliged to be unladen to get them over quicksand bogs. Finding a place sufficiently dry to pitch our tent on, though surrounded by water, we halted, both men and horses being too much exhausted to proceed farther. Mr. Evans thinking we could not be very far from the

river, went forwards a couple of miles, when he came upon its banks. This same river, which last Wednesday week had been crossed without any difficulty, was now nearly on a level with its first or inner bank: and its width and rapidity precluded all hope of our being able to cross it until its subsidence. This was most perplexing intelligence, our situation being such that we could neither retreat nor advance beyond the bank of the river, which Mr. Evans represented as being both higher and drier ground, and to all appearance sufficiently elevated to protect us from the flood should it increase: thither I determined to remove in the morning, and to take such further measures as might be deemed advisable in our present hazardous situation. Since Mr. Evans recrossed the river, we have had no rain in our immediate neighbourhood sufficient to cause the sudden rise, which therefore must be attributed to heavy falls among the mountains to the east south-east, from whence I have no doubt it derives its source. It was most providential that Mr. Evans and his companions crossed the river when they did; a single day might have proved fatal to them. We would fain lessen to our own imagination the dangers which surround us, and eagerly grasp at every circumstance that tends in any way to enliven our future prospects. That Providence, whose protection has hitherto been so beneficently extended to us, will, we confidently hope, continue that protection, and lead us in safety to our journey's end.

Owing most probably to the violent motion it experienced, my chronometer stopped: this accident was the more to be lamented, as the watch with which I was furnished by the crown had also stopped, and we had now nothing to regulate our time by.

July 26.—We passed a dreadful night; the elements seemed to be bursting asunder, and we were almost deluged with rain. Towards noon the weather partially cleared up. Our design of moving was however rendered abortive: we found it impossible to bring the horses near the tents to lade them, and the rain recommencing with great violence, continued throughout the day. An inmate of an alarming description took up its lodging in our tent during the last night, probably washed out of its hole by the rain: a large diamond snake was discovered coiled up among the flour bags, four or five feet from the doctor's bed.

July 27.—This morning the weather cleared up just in time to enable us to retreat to the river banks in safety, for we were washed out of the tent. The provisions and heavy baggage were carried by the people to a firmer spot of ground, at which place the horses being lightly laden, we got every thing transported to the river by one o'clock. Castlereagh River is certainly a stream of great magnitude; its channel is divided by numerous islands covered with trees: it measured in its narrowest part one hundred and eighty yards, and the flood that had now risen in it was such as to preclude any attempt to cross it. The outer banks

were good firm land, apparently free from floods, and extending not more on this side than a quarter of a mile, when it became wet and marshy: the banks were from twelve to seventeen feet high, and gradually sloped to the water. The trees on this firm margin of land were a species of eucalyptus, cypresses, and the sterculia heterophylla, with a few camarinæ. This river doubtless discharges itself into that interior gulf, in which the waters of the Macquarie are merged: to that river it is in no respect inferior, and when the banks are full, the body of water in it must be even still more considerable. Towards evening I thought the waters were falling, which was an event we anxiously looked for, to enable us to proceed to Arbuthnot's Range, from the heights of which we hoped for an interesting view. Natives appear to be numerous; their gunials (or bark-huts) are in every direction, and by their fire-places several muscle-shells of the same kind as those found on the Lachlan and Macquarie Rivers were seen. Game (kangaroos and emus), frequenting the dry banks of the river, were procured in abundance.

July 28.—The river during the night had risen upwards of eight feet; and still continued rising with surprising rapidity, running at the rate of from five to six miles per hour, bringing down with it great quantities of driftwood and other wreck. The islands were all deeply covered, and the whole scene was peculiarly grand and interesting. The sudden rise probably was

caused by the heavy rains of the preceding days; but great must be the sources from whence so stupendous a body of water is supplied, and equally grand must be that reservoir, which is capable of containing such an accumulation of water as is derived from this and the Macquarie Rivers; not to mention the supplies from the occasional streams which had their sources in the marshes which we have crossed. The water was so extremely thick and turbid, that we could not use it; but were forced to send back to the marshes for what we wanted. At night, the river seemed at its greatest height.

July 29.—The waters this day subsided rapidly. It is evident that there has been *no flood* in the river for a very considerable period prior to the present one, there being no marks of wreck or rubbish on the trees or banks. Now the quantity of matter is astonishing, and such as must take some years to remove. The rapid rise and fall in the water would seem to indicate that neither its source nor its embouchure can be at any great distance. The former is probably not far east of Arbuthnot's Range.

August 2.—It was not until this morning that the river had fallen sufficiently to allow us to ford it. Though the morning was unpromising with slight rain, it was not deemed prudent to lose a moment in passing it, while in our power; and by one o'clock every thing was safely over, to our great satisfaction. Before this, it had begun to rain hard, and it continued to do so throughout

the day, and great part of the night. Our observations place this part of Castlereagh River in lat. 31. 14. 14. S., long. 148. 18. E., variation 8. 14. E.

August 3.—A dark cloudy morning. At nine o'clock proceeded on our eastern course towards Arbuthnot's Range. The river had risen in the night so considerably, that had we delayed until this morning, we should have been unable to pass it. The rain had rendered the ground so extremely soft and boggy, that we found it impossible to proceed above three-quarters of a mile on our eastern course. We therefore returned, resolving to keep close to the river's edge, until we should be enabled to sound the vein of quagmire, with which we appeared to be hemmed in. In this attempt we were equally unfortunate, the horses falling repeatedly: one rolled into the river, and it was with difficulty we saved him: my baggage was on him, and was entirely spoiled; the chartcase and charts were materially damaged, and our spare thermometer broken: we therefore unladed the horses where they stood, and the men carried the provisions to a firmer spot, where they were reladen. We again proceeded easterly, and for upwards of a mile we travelled up to our knees in water and mud: the horses were here stopped by running waters from the marshes, encircling a spot of comparatively dry ground; they were again unladen, and with the utmost difficulty we got every thing safe over. Both men and horses were so much exhausted

by the constant labour they had undergone, that I determined to halt, in order to restore our baggage to some order. Our ardent hopes are fixed upon the high lands of Arbuthnot's Range, which I estimate to be about twenty miles off. The intermediate country, we fear, will be one continued morass.

August 4.—Proceeded on our journey. In the seven miles and a half which we accomplished to-day, the water and bog were pretty equally divided; and a plain covered with the former was a great relief both to men and horses, since an apparently dry brush, or forest, was found a certain forerunner of quicksands and bogs. The natives appear pretty numerous: one was very daring, maintaining his ground at a distance armed with a formidable jagged spear and club, which he kept beating against each other, making the most singular gestures and noises that can be imagined: he followed us upwards of a mile, when he left us, joining several companions to the right of us. Emus and kangaroos abound, and there is a great diversity of birds, some of which have the most delightful notes, particularly the thrush.

August 5.—At three o'clock we were obliged to give up all attempts to proceed farther this day; it was with the utmost difficulty we accomplished six miles: for the last half mile, the horses were not on their legs for twenty yards together. This, too, was in the middle of an apparently dry forest of iron bark

and cypress trees: the surface gave way but little to the human tread, but the horses were scarcely on it before the water sprang at every step, and the ground sank with them to their girths. In this dilemma, it was agreed to rest for the night, and in the morning endeavour to proceed to the nearest hill, which appeared to be distant about two miles and a half, with very light loads upon the best track we could find, and then return for the remainder of the baggage and stores. A foreknowledge of the difficulties we should have to encounter would certainly have prevented me from attempting to reach these mountains; the nature of this country baffles all reasonable expectation and conjecture, and that which appears one thing at a distance, has a quite different form and aspect when more nearly approached. Neither rivers, brushes, nor marshes, seem to make the least difference in the vegetation of this singular tract: a dreary uniformity pervades alike its geology and its botany.

August 6.—At eight o'clock the horses set forward with half the baggage; with considerable difficulty they at length reached the hill, and were immediately sent back for the remainder of the stores. The hill was about three miles from our camp, and from it a view of Arbuthnot's Range was obtained, distant nine or ten miles: its elevated points were extremely lofty, and of a dark, barren, and gloomy appearance; the rocks were of a dark gray, approaching to black, and from their crevices, a few

stunted trees protruded themselves. It was half past three o'clock before every thing was removed to the foot of the hill, when it was *much* too late to *think* of proceeding, anxious as we were to arrive at the main range itself. We killed this day one of the largest kangaroos we had seen in any part of New South Wales, being from one hundred and fifty to one hundred and eighty pounds weight. These animals live in flocks like sheep; and I do not exaggerate, when I say that some hundreds were seen in the vicinity of this hill; it was consequently named Kangaroo Hill: several beautiful little rills of water have their source in it, but are soon lost in the immeasurable morass at its base.

August 7.—About a mile from Kangaroo Hill, after crossing a marshy plain, we came to a limestone rock, spreading in smaller pieces over a low hill. It is somewhat remarkable, that this stone should again be found precisely under the same meridian as seen on the Lachlan and Macquarie Rivers: the same stratum appears to have run from south to north, upwards of two hundred miles. This hill is certainly its northern termination, since beyond it the low and marshy plains of the interior commence. At one o'clock we arrived under the hill which Mr. Evans had previously ascended: at this spot I intended to remain a couple of days, as well to refresh the horses, as for the purpose of ascending Mount Exmouth, from whence I promised myself an extensive view of the country over which our intended route lay.

On ascending the hill before mentioned, I was surprised with the remarkable effect which the situation appeared to have on the compass. The station I had chosen was the highest part, and nearly the centre of the hill; placing the compass on the rock before me, the card flew round with extreme velocity, and then suddenly settled at opposite points, the north point becoming the south. Astonished at such a phenomenon, I made the following observations. The compass on the rock, Mount Exmouth, bore S. 60. W. (its true bearing being N. 75. E.), and on raising it gradually to the eye, the card was violently agitated, and the same point now bore N. 67. E. About one hundred yards farther south, the compass was again placed on the rock; the effect on the compass was very different, Mount Exmouth bore E. 48. S., and the tent in the valley beneath S. 74. W. The card on raising the compass was rather less agitated than before, and from the eye, Mount Exmouth bore N. 77. E., and the tent S. 15. W., the true bearing of the latter being S. 13½. W. Thus the magnetic fluid seemed on this spot to have less influence on the needle, than on the spot where its power was first observed; and at a short distance from the base of the hill the needle regained its natural position. The rocks, when broken, were of a dark iron gray: they did not appear to contain any iron, for when tried at the tent, the magnet had no power over them. I could not discern any regular stratum of rock, the hill being covered

with large detached stones, many of which formed figures of five and six sides: the evening was too far advanced to permit any farther observations to be made*. Observed the variation of the needle by azimuth, to be 6. 22. E.

August 8.—We set off early this morning to ascend Mount Exmouth, distant four or five miles: at its base we crossed a pretty stream of water, having its source in the Mount; it took us nearly two hours of hard labour to ascend its rugged summits: we were however amply gratified for our trouble by the extensive prospect we had of the surrounding country. Directing our view to the west, Mount Harris and Mount Forster, whose elevations do not exceed from two to three hundred feet, were distinctly seen at a distance of eighty-nine miles. These two spots excepted, from the south to the north it was a vast level, resembling the ocean in extent and appearance. From east north-east to south, the country was broken and irregular; lofty hills arising from the midst of lesser elevations, their summits crowned with perpendicular rocks, in every variety of shape and form that the wildest imagination could paint. To this grand and picturesque scenery, Mount Exmouth presented a perpendicular front of at least one thousand feet high, when its descent became more gradual to its base in the valley beneath, its total elevation

* The island of Cannay, one of the Hebrides, affects the needle in a nearly similar manner. A rock in it is named The Loadstone Rock.

being little less than three thousand feet. To the north-east commencing at N. 33. E., and extending to N. 51. E., a lofty and magnificent range of hills was seen lifting their blue heads above the horizon. This range was honoured with the name of the Earl of Hardwicke, and was distant on a medium from one hundred to one hundred and twenty miles: its highest elevations were named respectively Mount Apsley, and Mount Shirley. The country between Mount Exmouth and this bounding range was broken into rugged hills, and apparently deep valleys, and several minor ranges of hills also appeared. The high lands from the east and south-east gradually lessened to the north-west, when they were lost in the immense levels, which bound the interior abyss of this singular country; the gulf in which both water and mountain seem to be as nothing. Mount Exmouth seems principally composed of iron-stone; and some of the richest ore I had yet seen was found upon it. On its sides were many different stones; but its perpendicular cliffs were of a dark bluish gray colour, shining when broken, very heavy, and close grained. Mount Harris, and Mount Exmouth, are composed of distinct materials, and in their formation bear not the slightest resemblance to each other; the granite of the former being more allied to the hills to the south south-east of it, from which however it is distant at least one hundred miles, a perfect level filling up the intermediate space. Many new, and otherwise in-

teresting subjects of the indigenous botany were discovered on the hills: among which were a species of persoonia, not previously observed, some xanthorrhææ or grass trees, and two or three coast plants. The heteromorphous sterculia of the interior, and some species of eucalyptus of very stunted growth covered its sides, which however for a considerable distance were not deficient in grass. Sandstone was found in large masses in the rivulet at its base, with pebbles of various colours, and of species none of which was found on the mount itself. It was near four o'clock before we returned to the tent, highly gratified with our excursion.

August 9.—In the course of the day, I again ascended Loadstone Hill, and repeated the experiments made on Friday, with the same results. Several different stations on the summit were tried, and the needle was variously affected; the spot where the phenomenon was first observed seemed to have the greatest effect on the needle. A common sewing needle was strongly rubbed with a magnet, and balanced on the point of the rock, when it was much agitated, and the point flew round from the north to the south. The needle of the circumferenter, taken out of the box, was affected in a similar manner, only that when balanced on the rock, the fluid did not possess sufficient power to turn the point more than one point of the circle instead of quite round, as when balanced in the compass box. A compound

magnet was laid on the rock, and applied to it in different ways; but it did not seem in any manner affected by the power which had so surprised us with its effect on the compass. The weather within the last week has become perceptibly warmer: the thermometer being seldom under 70 degrees at noon. The fires of the natives were seen at no great distance from us; and they seem to attend upon our motions pretty closely. The observations made here placed us in lat. 31. 13. S., long. 148. 41. 30. E., and I estimate the mean variation to be about 7.½ easterly. We found that no reliance could be placed on bearings taken with the compass on heights in this vicinity, and I am fearful that the bearings taken from Mount Exmouth will require verification, a difference of 4 degrees being observed in some, when compared with other bearings, which could not be supposed to be affected by the magnetic fluid.

August 10.—Proceeded on our journey: our course for the first six or seven miles being to the north north-east, and afterwards north-east half east, which latter course I intended to steer for some time. It was the best day's travelling we had experienced since quitting the Macquarie River, being generally over low strong ridges, the sides and summits of some of which were very thick brush of cypress trees, and small shrubs, particularly the last two miles. We stopped for the evening in an extensive low valley north of Mount Exmouth, and running under its base, bounded on

the north-east by low forest hills. To the south the hills were rocky, abrupt, and precipitous. On the whole we accomplished eleven miles.

August 11.—Our route lay over low valleys of considerable extent of open forest ground, but so soft and boggy, that it was with difficulty we made any progress: it would seem that much rain had fallen here lately, and completely saturated the soil, which is a light, sandy mould. In these valleys there are small streams of water, having their origin in the surrounding hills; they all terminate northerly. We could accomplish but seven miles on a north-east by east course. In the evening we had an awful storm of thunder and lightning, accompanied with torrents of rain. The reverberation of sound among the hills was astonishing. The natives continue in our vicinity unheeded, and unheeding: even the noise of their mogo upon the trees is a relief from the otherwise utter loneliness of feeling we cannot help experiencing in these desolate wilds.

August 12.—We found that we could not maintain our direct course, as the low ground was so boggy, that the horses were altogether unable to move on it. Keeping therefore the banks of the little stream where the ground was firmer, we reached the chain of hills bounding the valley to the southward: we wound along the base of the hills on a variety of courses, not being able to quit them twenty yards without being bogged. Finding that

the hills trended too much to the south-west, we kept down the bed of a small stream for two or three miles, and halted on a fine apple tree flat of rich land, watered by a very fine small stream, which was joined by the one we came down. The main stream ran to the northward. The apple tree flats are uniformly of firm hard ground, while the soil on which grow the iron-bark, pine, and box, is as invariably a loose sand, rendered by the rain a perfect quicksand. These bogs are the more provoking, as without such impediments the country is clear and open, and as favourable for travelling over as could be wished: we have had any thing but a dry season, and it is to the heavy rain which might naturally be expected to fall near high mountains, that our present difficulties must be ascribed. We travelled between nine and ten miles, but our course made good was nearly south-east only five miles. A few new plants were found: the hills were a mere bed of iron ore.

August 13.—We proceeded at our usual hour; and did not halt till near sun-set, but accomplished no more than six miles, in the course of which the horses were obliged to be unladen, and the men carried the loads upwards of half a mile before the horses could be got across the quicksands. They are indeed properly so termed, consisting of two or three inches of light mould, on about eighteen inches of loose sand, the whole covering a rocky

or stony bottom. On treading on them, water would fly up several inches; and it was with difficulty men could pass over them, much less horses. Quicksands of a similar nature prevented our reaching a small creek running under a high craggy ridge of hills; we therefore stopped at the edges of them, every body completely worn out. The appearance of the country passed over was most desolate and forbidding, but quite open, interspersed with miserable rocky crags, on which grew the cypress and eucalyptus. On the more level portions of the country, a new and large species of eucalyptus, and another of its genus (the iron bark), were the principal if not the only trees. Many of the rocks were pointed and basaltic, but the general species was a coarse sandstone. Miserable as the country was in other respects, it was fruitful in new plants.

August 14.—As it rained hard during the night, and the rain still continued to fall in thick showers, I thought it advisable to rest.

August 15.—Cloudy, with strong winds from the south-east. We crossed the creek about two miles from our resting-place, but soon found that any attempt to advance in that quarter would be abortive, the morass and quicksands extending into the very water, and denying all egress. We therefore recrossed the rivulet about a mile more northerly with better success, and suc-

ceeded in gaining some stony hills, which, with two or three intervening marshy valleys, continued for the rest of the day's route; the latter part being up very high, rocky, barren hills, with narrow defiles. From these heights we descended into a pretty valley of considerable extent, and, to our great joy, of sound, firm soil, with plenty of good grass: the water however was strongly impregnated with iron, so that we could hardly drink it. This valley, which we named Wiltden Valley, was enclosed on all sides except the north, by lofty, rocky hills of coarse sandstone, adorned with various species of acacia in full bloom, with a vast variety of other flowering shrubs of the most beautiful and delicate description, adding greatly to our botanical collection. We accomplished in the whole twelve or thirteen miles, about six of which were in the direction of our proper course.

August 16.—We had hardly begun to lade the horses, when the rain recommenced with greater violence than in the night, and effectually prevented us from proceeding. The country presents sufficient obstructions to our progress, not to render the delay caused by a day's rain a matter of much inquietude. The loss of time is of little consideration, when compared with the soft and boggy ground which such heavy falls leave. A species of banksia was seen to-day under the same meridian as on the Macquarie. It would seem that particular productions of the vegetable as well as of the mineral kingdom run in veins nearly

north and south through the country. This peculiarity has been remarked of other plants, besides the species of banksia.

August 17.—Our course this day led us over a barren, rocky country, consisting of low stony ranges, divided by valleys of pure sand, and usually wet and marshy: latterly we appear to be descending from a considerable height, to a lower country to the north-east. The whole was a mere scrub covered with dwarf iron barks, apple trees, and small gums; the soil scarcely any thing but sand, on which grass grew in single detached roots. The horses fell repeatedly in the course of the day, and they were now so weak that they sank at every soft place. Between four and five o'clock, after travelling about ten hours, we stopped at a small drain of water for the night, having accomplished nearly eleven miles. In our track we saw no signs of natives, and the country seemed abandoned of every living thing. Silence and desolation reigned around.

August 18.—It is impossible to describe in adequate language the different trying obstructions we encountered during this day's journey: after meeting and overcoming many minor difficulties of bog and quicksand, we had accomplished nearly eleven miles, and were looking out for a place to rest, when we entered a very thick forest of small iron barks which had been lately burnt; and their black stems and branches, with the dull bluish colour of their foliage, gave the whole a singularly dismal and gloomy

appearance. So thick was the forest that we could hardly turn our horses, nor could the sun's rays penetrate to the sandy desert on which these trees grew. Without the usual appearances of a bog, our horses were in an instant up to their bellies, and the difficulties we had in extricating them would hardly obtain belief. In this dilemma, scarcely able to see which way to turn, we traversed the margin of this extensive quicksand for nearly three miles in a direction contrary to our course, before we could find firm ground or water for the horses, which we did not effect till sunset; and then (as for the last three days) there was nothing for them to eat but prickly grass, which possesses no nourishing qualities. This fare, after their hard labour, reduces them daily.

August 19.—After wandering about the whole day without gaining any thing on our course, for the quicksands kept us revolving as it were in a circle, the exhaustion of the horses obliged us to stop. It was painful to behold them, after being disencumbered of their loads, lay themselves down like dogs about us: it was the fourth day that they had been without grass, and they preferred the tender branches of shrubs, &c., to the prickly grass. The backs of the greater part of them were, notwithstanding every care, dreadfully galled, so that they could, when first saddled, scarcely stand under their burdens. These quicksands lie in the hollows between the low irregular hills, which

rise on this otherwise level country: their point of discharge is uniformly north-westerly. The union of many of these minor drains forms occasionally a large one, and the points of the hills which meet upon them afford the only means of crossing them. It was evident that the early part of the winter had been very wet, and the late rains had probably been the cause of these morasses, which still continued to drain themselves off in running water. This region must at all times be impassable from opposite causes: in wet seasons it is a bog; in dry ones, there is no water. Finding, as above remarked, that northerly and north-east the country declined as it were to nothing, it was resolved to pursue a more easterly course than that hitherto followed: and instead of attempting to go round the morasses which we might meet with to the north, to follow them southerly, a course which in time must certainly take us to a more elevated country. Such a road is rendered now absolutely necessary by the condition of the horses. Our dogs, which had so long contributed to our support, had been for the last four days dependant upon us for theirs, and we were too much indebted to their exertions not to share our meals with them with cheerfulness. These woods abound with kangaroo rats, and it is singular that, pinched as the dogs were, they would not touch them even when cooked.

August 20.—This day after travelling upwards of nine miles,

and having pushed the horses at the risk of their lives through two minor branches of the bog, what was our mortification to find, that we were within a few hundred yards of the spot we set out from! We had first attempted to cross the main bog northerly, and afterwards kept along its edge southerly; and the result was, that we found it to extend in a complete circle around us. From a slight rise in the centre of it, we could see the country to the north-east, north, and north-west, low and uneven; Hardwicke's Range distant about forty miles, bounding it between the north and east. The result of this day's exertion quite subdued our fortitude, and for a moment a feeling nearly allied to despair had possession of our minds. We knew not which way to turn ourselves. To return to Arbuthnot's Range, and again undergo what it had cost us so much to overcome, could not be thought of for a moment; but upon that mature reflection which our serious situation demanded, it was deemed the most prudent plan to return so far back as would enable us to reach the higher lands to the south-east. This we expected to do by Saturday evening: twenty miles back we had left land of considerable elevation; and we could only hope that in its vicinity we should find a dry ridge on which to accomplish our purpose, and occasionally a patch of country in which the horses might find subsistence; for they were at present very much reduced.

August 23.—We returned yesterday to Parry's Rivulet, within twelve miles of Weltden Valley, which was the whole distance we had gone in the direction of our course towards the coast, although we had travelled during the week upwards of seventy miles. The weather for the last four days has been extremely tempestuous, with slight showers of hail and rain: the winds were chiefly from the west and north-west, the temperature being extremely cold for the latitude and season. The observations of to-day place this station in lat. 30. 57. 20., long. 149. 20. E. Variation 8. 42. E.

August 24.—We were a little surprised at finding that a severe frost had taken place during the night, and that the thermometer was now as low as 28 degrees. Ice lay within a few yards of our fire, of the thickness of a dollar. Our course throughout the day was southerly, and led us up the banks of Parry's Rivulet. We experienced fewer difficulties than on any day since we had entered this desert, and accomplished between nine and ten miles, at the end of which we entered a small valley of good forest ground with tolerable grass; though early in the day, the horses needed refreshment too much, not to induce me to stop here for the remainder of it: as we could not at the utmost have gone above two miles farther. This valley, and the appearance of forest hills to the southward, gave us strong hopes that by continuing our present course for a day or two longer

we should get into a better line of country, and be enabled to resume our easterly course. Parry's Rivulet was here a series of large ponds, near which were traces of natives, but of old date. In this desert, we have never met with any signs that can lead us to believe it has ever been before crossed by any human being.

August 25.—A smart frost during the night: the morning fine and clear. At eight o'clock we proceeded on our route, taking a more easterly direction according to circumstances. Between three and four miles from our camp, we had an extensive view to the east and south-east, and saw with extreme satisfaction a lofty chain of fine forest hills thinly timbered, bearing east south-east of us; and distant fourteen or fifteen miles. To the east were extensive flats, bare of timber, and apparently either composed of white sand, or covered with dead grass; our distance would not enable us to distinguish which: these flats were bounded by remote rising hills seemingly clear and open. A high peak, bearing north, was named Kerr's Peak; and a very lofty mount, under which the west extremity of the plains lay, was named Mount Tetley: and the westernmost remarkable hill in the chain first mentioned, Whitwell Hill. The bogginess and ruggedness of our route, for the remainder of the day, sufficiently tried our strength: we accomplished however thirteen miles, and halted in a small valley about four miles south of Whitwell Hill. This valley was bounded east and west by rocky hills, but the soil

was better, and the grass of good quality. The base of these hills was of close-grained white-coloured granite, or whinstone: the summits of good freestone: on the sides several good pieces of iron ore were picked up.

August 26.—While Mr. Evans proceeded with the horses on an eastern course for Mount Tetley, Dr. Harris and myself went towards the spacious valley at the foot of Whitwell Hill. This we soon reached, and travelled down its centre, along the banks of a beautiful stream of water which fertilized and drained it. The extent of this valley towards the south-west, we could not discover, as its windings were lost among the forest hills in that direction. We went down to the east between seven and eight miles, when we rejoined the horses at the base of an elevated conical hill, standing detached at its east entrance, which was here four or five miles wide. On ascending this hill, the view which was on all sides presented to our delighted eyes was of the most varied and exhilarating kind. Hills, dales, and plains of the richest description lay before us, bounded to the east by fine hills, beyond which were seen elevated mountains. To the north-east an extensive valley, from eight to ten miles wide, led to Hardwick's Range, being a distance of about thirty-five miles. In this great valley were numerous low hills and plains, thinly studded with timber, and watered by the stream, down the banks of which we had travelled. From its eastern side, these low hills gradually

Drawn by Major Taylor from a Sketch by M.r Evans.

L. Clark, Sculp.t

LIVERPOOL PLAINS. West Prospect from VIEW HILL.

London, Published by J. Murray, 1832.

rose to a loftier elevation: but were still thinly timbered, and covered with grass. To the east south-east, and south-east, clear plains extended to the foot of very lofty forest hills, at a medium distance of from twenty-five to forty miles. These were the plains seen on our yesterday's route, and which we feared were sand. We found them to consist of a rich dry vegetable soil; and although, from their vast extent, they may, as a whole, be properly denominated plains, yet their surfaces were slightly broken into gentle eminences with occasional clumps, and lines of timber. Their white appearance was occasioned by the grass having been burnt early in the year, and the young growth killed by the frosts. The little rivulet, that watered the north-west side of this track of country, had overflowed within these few days; but the ground left by the retreating waters was as firm and solid, as those parts which had not been touched. The sides of the hills were of the same black mould, stony towards their summits, and the higher eminences rocky. The rocks were of a very hard whinstone, the stratum nearly perpendicular, or rather standing up in regular basaltic figures, similar to those on Loadstone Hill. These valleys and hills abound with kangaroos, and on the plains numbers of emus were seen. We seemed to be once more in the land of plenty, and the horses as well as men had cause to rejoice at the change, from the miserable harassing deserts through which we had been struggling for the last six

weeks, to this beautiful and fertile country. From the hill on which we stood, bearings were taken to the most remarkable points and objects connected with the survey; and the most distinguished, in point of beauty or singularity of appearance, were honoured with distinctive appellations. The valley down which we had travelled was called Lushington's Valley (after the Secretary to His Majesty's Treasury); the extensive one to the north-east, leading to Hardwick's Range, Camden Valley (after the noble Marquis); the plains to the east and south-east were honoured with the name of Lord Liverpool; the hills bounding Lushington's Valley, on the south side, Vansittart's Hills, after the Chancellor of the Exchequer; while several less remarkable hills were designated after persons endeared to our recollections by early friendship. A great variety of new plants rewarded the exertions of our botanist, in ascending Mount Tetley; and many, hitherto only known on the coast, were discovered on the hills and in the valleys: the acacia pendula was also seen; it had hitherto been the usual characteristic of wet lands, but it was here growing on the most dry and elevated situations. The timber on the plains and hills was chiefly those species of eucalyptus called apple tree, box, and gum trees; and on the banks of the rivulet were a few large camarina. So much time was consumed in ascending hills and examining the country, that we did not go more than ten miles on a direct course: it was however time

well bestowed. Three native fires were seen in Lushington's Valley, but the whole of this part of the country appears to be very thinly inhabited; a few wandering families making up the total of its population. The small rivulet in Lushington's Valley was named Yorke's Rivulet, in honour of Sir J. S. Yorke.

August 27.—Pursuing our course to the eastward, towards the range of low hills bordering the plains in that quarter, between five and six miles, we came to a fine stream of water, crossing the plains from the south to the north. There had been a flood in this rivulet within these few days, marks of which were observed about fifteen feet high; but still within the banks. It appears that the plains are chiefly flooded from Yorke's Rivulet, the remaining waters of which, together with rain-water, were in several places still standing on the surface; but not to the extent that the horizontal level of these plains would have led me to suppose would probably be the case. The far greater portion was a rich dry soil, and that the water is never permanent on any part of them is clearly demonstrated by the total absence of any aquatic or bog plants. From this rivulet, the three main branches of these immense plains were clearly visible to the east by south south-east, and north-east. Of the extent of the two former, we could only judge from the lofty bounding chains of hills in those quarters; and which we could not estimate to be nearer than from forty-five to fifty miles. Hardwick's Range

bounded these to the north-east, with many intervening beautiful hills and valleys. We found the distance across the plains to the hill where we stopped, to be upwards of fourteen miles on an east line. Chains and ridges of low forest hills, which gradually rise from the horizontal level, are scattered over these plains, and stand for the most part detached like islands; varying the scenery in a most picturesque manner, as they are generally clothed with wood of apple tree, cypress, and other species of eucalyptus, intermingled with various acacias in full flower. Mr. Evans ascended Mount Tetley to take bearings from it. He found the compass to be affected in a similar manner to that remarked on Loadstone Hill; the north point of it when placed on the rock, becoming the south. This remarkable alteration of the needle was also observed on several other hills in this vicinity, but in a less degree; the bearings generally varying from two to three points from the truth. On the hill under which we stopped this evening, named View Hill, the needle varied three points. In consequence of the heavy rains and recent floods, travelling on many parts of these plains was very heavy; the soil being a rich, loose loam, of a dark red approaching to a black colour, but of great apparent fertility and strength: some hundreds of kangaroos and emus were seen in the course of the day. We killed several, the dogs being absolutely fatigued with slaughter: the game was by no means shy, but came close up to us, as if to examine

us. Indeed I do not think they are much disturbed by natives, of whom we have seen few signs in this neighbourhood. The stream crossing the plains was named Bowen's Rivulet, in honour of Commissioner Bowen, of the Navy Board.

August 28.—The season continues to get warm and sultry. We pursued an east north-east course during our day's journey, leading us through a fine open forest country generally level in the direction of our course, but rising into forest hills to the north and south of us. At eight miles, ascending from this level, we saw the great plains which extend along the line of our course, and are separated from us by a rich open country of hill and vale, distant four or five miles. A branch from these plains led to the north-east across our course, and was distant five or six miles. We proceeded in the whole ten miles, and stopped in a pretty forest valley, with plenty of water and good grass. The stones composing the hills were very various, sometimes different species of granite, then sandstone, and on others loose slate. On View Hill we found particularly rich iron stone. The soil was uniformly good, and covered with grass; the country by no means thickly timbered, chiefly with box, and a few cypresses.

August 29.—On our departure we almost immediately descended a rocky and steep hill, covered with cypress and small brush; from thence we descended upon a level forest country,

which continued for the remainder of our journey (seven and a half miles), to the edge of the extensive flat which we had seen yesterday. As we should not have been able to cross it before nightfall, I thought it better to remain where there was plenty of grass and water. From our tent we had a singularly picturesque and pleasing prospect. To the north, Hardwick's Range, distant between forty and fifty miles: the country broken into low forest hills and plains to its base. To the north-east, east, and south-east, our view was bounded by beautiful forest hills seldom rising to any great elevation, thinly wooded, and covered with grass. These hills bounded the plains, and varied in distance from ten to thirty miles. To the north-east the country was lowest, but appeared good and open: that part of the plain near which we encamped was wet and marshy; and the horizontal level of the whole appeared to warrant the supposition that at some (perhaps not distant) period, these vast plains formed chains of inland lakes, which the washings from the hills have now nearly filled up; as the water at present does not exceed a few inches in depth, and is only partially spread on the surface, forming but a moderate proportion of the whole. In dry seasons there is evidently none: the hills passed over this day were of a curious species of puddingstone and freestone. The hills on the opposite side of the plains were named Melville Hills, in honour of the first Lord of the Admiralty; and the

valley at the extremity of it leading to Hardwicke's Range, Barrow's Valley, after one of the secretaries of that board.

August 30.—A day of rest and refreshment to ourselves and horses. Game abounds, and our dogs abundantly supply us. The observations made here, place our situation in lat. 31. 7., long. 150. 10. E.

August 31.—We were agreeably disappointed, in finding that the wet marshy ground did not extend above three quarters of a mile, the remainder being dry firm land of the richest description: at six miles we crossed a considerable stream, running to the north through Barrow's Valley: this stream, divided the plain into nearly two equal parts, it being ten miles and a half across. This stream had been very recently flooded, and the water, yet muddy, had not subsided within its proper level; the height of the banks from fifteen to twenty feet. On the east side of the plain, we found the marsh extend about one mile and a quarter from the forest ground which borders it; though wet, it was now strong ground, and might easily be laid dry. On quitting the plains we entered a very fine open forest flat, through which we proceeded a mile and a half, and encamped for the evening under a lofty hill named Mount Dundas, by a small spring of excellent water. Ascending this mountain, we found that the country in the line of our course was high, broken forest land, the eastern-most ranges of which (distant from thirty-five to forty miles)

appeared to have a stream running under them, by reason of the thick haze which rose from the valley beneath. To the north bending round to the north-east, the country was beautifully picturesque, consisting of low, open forest hills, bounded by higher chains of hills that formed the southern side of the spacious valley under Hardwicke's Range; through which I no longer doubted that a considerable stream had its course, since all the waters we had hitherto crossed ran in that direction. A great many smokes, arising from the fires of the natives, were seen to the north-east and north. To the south-east, south, and south-west, our view extended over that vast tract of level champaign country intermingled with hills, sometimes rising into lofty peaks, as has already been described. The abundance of game, such as emus, and kangaroos, and of wild ducks on the stream, was wonderful: our dogs after severe battles killed two emus, who however tore one of them very dangerously. We called the river which divided and watered the plain Field's River, in honour of the Judge of the Supreme Court.

September 1.—We pursued our course to the east north-east, winding through rich valleys bounded by lofty forest hills for seven miles; when by a gentle descent we entered a rich and spacious vale, bounded on the east by very high hills, and on the west by others less elevated. At twelve miles we stopped at some ponds near the centre of the vale. The hills were very stony, of

various species—granite, freestone, and pudding-stone; they were however well covered with grass, and quite clear and open; the valleys and levels excellent, with good timber, chiefly apple tree, box, and gum. On the higher ridges of the hills, and occasionally on their sides, were many fine cypresses: there was nothing grand or imposing in the scenery; but it was simple and attractive from its richness and extent: the hills sometimes rose into singular forms which were continually changing in our progress, and appeared well calculated to afford an ample range of sheep pasture. The extensive vale in which we stopped was named Goulburn Vale, in honour of the under Secretary of State for the colonies.

September 2.—Our expectations of finding a river to the eastward, were this day verified: after passing for eleven miles across this beautiful vale, we came to a deep and rapid stream running to the north, through the valley whose eastern side it waters: finding it too deep to be forded, we constructed a bridge across a narrow part of it, by felling such large trees as would meet, by which the baggage was taken over: the horses were swum across. One of the men, foolishly attempting to swim over on a horse, nearly paid for his imprudence with his life: as he could not swim, he was carried down the stream near a quarter of a mile, and was several minutes under water. His body being providentially washed across a log, was the means of his pre-

servation. It was late in the afternoon before our passage across was effected, so that we halted on the banks. This was the largest interior river (with the exception of the Macquarie and Castlereagh), which we had yet seen. It would be impossible to find a finer or more luxuriant country than it waters: north and south, its extent is unknown, but it is certainly not less than sixty miles, whilst the breadth of the vale is on a medium about twenty miles. This space between the bounding hills is not altogether level, but rises into gentle inequalities, and independently of the river is well watered; the grass was most luxuriant; the timber good and not thick: in short, no place in the world can afford more advantages to the industrious settler, than this extensive vale. The river was named Peel's River, in honour of the Right Hon. Robert Peel. A great many new plants were found to-day and yesterday, chiefly of the orchis tribe*: we saw numbers of the ornithorynchus, or water mole, in the river, also a few turtle: we were not successful in obtaining any fish, so that we were unable to decide whether it contained the same species as the Macquarie.

September 3.—After passing over a fine and gently rising country for between four and five miles, we ascended a very lofty chain of hills, being the eastern boundary of Goulburn Vale;

* Orchideæ of Juss. and Brown.

these hills were of good soil, and covered with excellent grass to their very summits. Ascending two of the highest ridges, several circular orifices were observed on them about twelve feet in diameter, and five feet deep. Great quantities of small stones resembling basaltes were in heaps round the edges, at a little distance from which the stones were perpendicular, and firmly bedded in the earth; many of them regular six-sided figures, and all fractured into laminæ, from two to nine inches in thickness. The rocks upon this range were of a peculiarly hard quality, and of a deep blue colour, approaching to black when broken. The country easterly appeared broken into a series of rocky detached hills: and on descending this range, we found an immediate change in the quality of the soil, being in the valleys of a light coarse sand, the surface covered with gritty particles as from pulverised coarse granite. The difference in the rocks composing the hills was here very remarkable, being a very coarse granite of the same description as in the neighbourhood of Bathurst, scattered in immense masses both in the valleys and on the hills; and our astonishment was more than once excited at the causes which could have effected their removal from their primitive bed. On a hill near which we encamped, was a single mass of granite apparently thrown up perpendicularly from the bosom of the earth: it was twenty-six feet high and had six distinct sides, ending in an irregular point at the summit, and was forty-eight

feet in circumference. The valleys, though sandy, afforded us plenty of good grass and water, and the hills furnished abundant employment for the botanical collector.

September 4.—After leaving the valley in which we encamped, we entered one much more extensive, and communicating with Goulburn Vale. Between five and six miles on our route, we reached a beautiful small river coming from the eastward and joining Peel's River, of which it appears to be a principal branch. For the remainder of the day's journey, we proceeded up the fine valley which this stream watered, bounded on the north and south by lofty and fertile hills covered with rich herbage, having numerous smaller valleys and streams terminating in this principal valley. The whole scenery was thinly clothed with wood, and occasionally a bold craggy promontory terminating at the river gave it a diversity, which its general softness of feature or outline required: there were no principal ranges of hills, but they broke in and upon each other, forming the utmost variety of shape. The rocks and stones which composed the bases and summits of these hills, were not less various than their form: scarcely two were alike. Granite, coarse porphyry, freestone, and whinstone were frequently found on the same hill, and the beds of the streams were of every variety of pebble. This fine stream received the name of Cockburn River.

September 5.—Our course this day sometimes led us over

very elevated ridges, and at other times through deep and rich valleys. Some of these hills were at least three thousand feet in height, and clothed with grass to their summits. Others of the less elevated were entirely free from rocks, and of the finest soil. The timber chiefly box, with some few trees of another species of eucalyptus called stringy bark, and cypress. A number of small streams watered the deep valleys to the north and south, falling into Cockburn River. Large quantities of quartz were in various places, as also good flint, which was found in large masses in the bed of Cockburn River, and also in small pieces on the hills. This was the second flint that has been discovered in New South Wales. We halted in a small and beautiful valley near Cockburn River, after having accomplished nine miles.

September 6.—A day of rest. The observations place this station in lat. 31. 04. 35 S., long. 151. 05. 30. E., variation 9. 58. E.

September 7.—The morning clear and fine. At half past seven o'clock we proceeded on our journey: in the whole course of it, we never experienced more precipitous travelling than during the first six miles. Travellers, less accustomed to meet difficulties, might perhaps have been a little alarmed at traversing such steep and shelving hills, the loose stones on which added to the insecurity of our footing. Nevertheless we found it extremely pleasant, from the romantic beauty of the scenery and the freshness of the

verdure. We had been ascending an extremely elevated country for the last thirty miles; and I was in great hopes of soon reaching the point of division between the eastern and western waters. By a tolerably easy acclivity, we gained that which I took to be the highest of these congregated hills, in hopes it might possibly lead into a main range. From its summit we had a very extensive prospect over the country we had left, and also to the southward, in which direction the land appeared broken and hilly, and but thinly clothed with timber. To the east and north-east it appeared far less broken, and certainly less elevated than the ridge we were on. This ridge soon expanded to a broad surface of open forest land, and proceeding on it to the east about a mile, we perceived in the valley beneath us a considerable and rapid stream running to the north, and afterwards apparently taking a more easterly direction. A more remarkable change in the outward appearance of a country was perhaps never before witnessed. In less than a mile, the timber had entirely changed from the bastard box to another kind of eucalyptus, called common blue gum, which grew in great luxuriance in the country before us. Until now this species had never been seen except on the immediate banks of running streams. In the course of the day, great quantities of fine stringy bark were also seen. The soil, instead of the light black mould, which had been the general covering of the country, was now changed to a stiff tenacious

clay; and although well clothed with grass, its less luxuriant growth evidently showed the difference of soil not to be favourable. From this hill or range we descended very gradually for nearly two miles to the river before seen, and up the banks of which we proceeded about a mile farther, when we halted for the evening. The country was perfectly open, though much covered with fallen timber; the banks of the river sloping and quite clear of timber; and being within one hundred miles of the sea coast, I had a strong belief that we had descended from the highest land, and that we should meet with no dividing ranges in the course of our future progress. It is impossible to form any certain conclusion at present, as to the course taken by this stream. Whether it finds its way to the coast, or is lost like the other streams of this country, will, I think, in a great measure depend upon the fact of our having crossed the highest ranges of the country. One of the men who had taken the dogs out after kangaroos fell in with a party of natives, among whom were some women and children. Two of the men accompanied him to the tent. It was evident from the whole tenor of their behaviour that they had previously heard of white people (most probably from the settlement at New Castle); their appearance was most miserable, their features approached deformity, and their persons were disgustingly filthy: their small attenuated limbs seemed scarcely able to support their bodies; and their entire person

formed a marked contrast to the fine and manly figures of their brethren in the interior. We gave them a small turtle which we had just caught in the river, and they sat down to dress it instantly. In fact, their cooking was very simple; the fire soon separated the shell from the meat, which with the entrails was devoured in a few minutes. Some of the people went to visit their camp, where they found eight or ten men, but the women and children were sent away. The same jealousy of women exists throughout the interior. The great number of fallen trees was in some measure accounted for by the men observing about a dozen trees on fire near this camp, no doubt the more easily to expel the opossums, rats, and other vermin which inhabit their hollows. We were not successful with our lines, though the depth and breadth of the river had made us a little sanguine. There did not appear any great marks of flood; none was seen exceeding five feet in height, which led us to conclude its source was not very distant. This river was named Sydney, as we this day crossed the meridian of that town.

September 8.—We proceeded up Sydney River to the south-east about three miles before we could find a convenient place to cross, as the stream ran with great rapidity over a rocky bottom. The country on either side sloped to the river with gradual declension, and was an open forest country. On crossing the river, we passed through some noble forests of stringy bark, growing

generally on the sides and ridges of stony barren hills: these forests extended above two miles from the east of the river; after which the country became perfectly open, and of a level, or rather alternately rising surface. To the north and north-east the river was beautiful, the same description of country extending as far as the eye could reach, with no elevated points or ridges to obstruct it. Indeed I am clearly of opinion, that if we had kept a more northerly course from Lushington Valley, we should have avoided the rugged though fine country we have passed through for the last two days. The determination of all the hills and slopes is northerly, and the rivers which we have crossed have also taken the same direction. We proceeded about nine miles farther through the finest open country, or rather park, imaginable; the general quality of the soil excellent, though of a stronger and more tenacious description than farther westerly. We halted in a fine and spacious valley, where art, so far as it is an auxiliary of beauty, would have been detrimental to the fresher and simpler garb of nature. This valley was watered by a fine brook, and at a distance of a mile we saw several fires, at which appeared many natives: upon discovering us, however, they immediately departed. I think that the most fastidious sportsman would have derived ample amusement during our day's journey. He might without moving have seen the finest coursing, from the commencement of the chase to the death of the game: and when tired of killing

kangaroos, he might have seen emus hunted with equal success. We numbered swans and ducks among our acquisitions, which in truth were caught without much exertion on our part, or deviating in the least from our course. Granite and a hard whinstone were the most predominant among the stones; small pieces of quartz, and loose rotten slates covered the tracks, on which grew some of the finest stringy bark trees I ever saw. Indeed the other timber, which consisted chiefly of common blue gum, was far larger than usually seen on forest lands. That species of casuarina called the beef wood (or she oak), was also seen to-day for the first time: it is in part a coast tree, and sufficiently denoted that we were approaching the sea. Observed the variation of the compass to be 8. 51. E.

September 9.—In the night we had a severe frost, which in the morning was succeeded by a dense fog. We found however that it was confined to the valley, for on ascending the hills, the prospect was clear and open. We passed over a beautiful and well-watered country for about six miles, when we came on the rivulet which we had quitted in the morning; but now by the addition of several brooks from the valleys, increased to a considerable stream. Its banks were quite clear of timber, and expanded into extensive sheets of water, which added greatly to the beauty of the scenery. This stream running to the east south-east verified the conjecture that we had passed the dividing range

of hills, and that this and most probably Sydney River (much superior in magnitude) were coast streams. Crossing the former, we ascended a hill on the opposite side, from whence the river's course was seen to the south-east, running through a fine and open country. To the northward and north-east the prospect was equally satisfactory, the hills being connected by long and easy slopes, which would have rendered their ascent a matter of little difficulty had our course lain over them. After crossing the river, the country still continued open, but the soil was not so good, and we found that we were ascending in a gradual manner. For the last five miles the country was thickly timbered with stringy bark and gum trees, the soil bad, and crossed by numerous wet hollows, which showed we were nearly on the summit of a level and extensive range of hills. We accomplished fourteen miles with much ease, and halted for the evening in a thick stringy bark forest, where there was worse entertainment for both man and horse than we had experienced for some weeks.

September 10.—A tempestuous morning, with occasional showers of small rain, prevented us from quitting our camp. In the intervals of fair weather, I walked to a hill about one mile off, being the highest part of the range we were upon. Our prospect from it was exceedingly grand and picturesque. The country from north to south-east was broken into perpendicular rocky ridges, and divided longitudinally by deep and apparently impass-

able glens. The rocks were covered with climbing plants, and the glens abounded with new and beautiful ones. Our collector descended one of those nearest to us, and was amply repaid by the acquisition of nearly sixty most desirable plants, some of which appeared even to constitute new genera. The rocks were covered with epidendra*, bignoniæ, or trumpet-flowers, and clematides, or virgin's bower, of which last genus three species apparently new were discovered. Far different was the character of these glens from the rugged and barren blue mountain ranges: fine open forest land ended abruptly on the precipices. The bottoms were of the richest soil, the rocks instead of being of a coarse sandstone were of a hard texture, and of a blue shining appearance when broken. The country eastward of these glens appeared very lofty, and much broken; but as in the direction of our course, we should have some miles of good open country to travel over, we had strong hopes that our difficulties would prove greater in contemplation than reality. Among the timber in these glens were some of the stateliest stringy bark trees that we had ever beheld: in fact, the timber altogether is unusually good. To the south-west and north-west, the country is low and beautifully diversified by long sloping hills.

September 11.—Our course for near eight miles led us along

* Of the genera cymbidium and dendrobium of Swartz.

a broad and very elevated ridge of poor forest land, intermixed with brush; when we were stopped from proceeding farther eastward by the deep chasm or glen, which we had seen at a distance yesterday. This tremendous ravine runs near north and south, its breadth at the bottom does not apparently exceed one hundred or two hundred feet, whilst the separation of the outer edges is from two to three miles. I am certain that in perpendicular depth it exceeds three thousand feet. The slopes from the edges were so steep and covered with loose stones, that any attempt to descend even on foot was impracticable. From either side of this abyss, smaller ravines of similar character diverged, the distance between which seldom exceeded half a mile. Down them trickled small rills of water, derived from the range on which we were. We could not however discern which way the water in the main valley ran, as the bottom was concealed by a thicket of vines and creeping plants. From the range on which we were, we could distinctly see the coast line of hills. The country between us and the coast was of an equal elevation, and appeared broken and divided by ravines and steep precipices. We continued along the edge of this ravine southerly for about four miles, when we halted for the day. Our only hope of being enabled to cross this barrier depends upon our pursuing a southerly course, when if the waters run northerly, the dividing range between them and Hunter's River will permit us again to turn easterly. If on the contrary

they run southerly, their junction with Hunter's River will equally (it is to be hoped) facilitate that object.

September 12.—We were obliged during the whole of this day's journey, to keep along the ridge bordering on the glen. It is impossible to form a correct idea of the wild magnificence of the scenery without the pencil of a Salvator. Such a painter would here find an ample field for the exercise of his genius. How dreadful must the convulsion have been that formed these glens! The principal glen led us to the westward: there were others that fell into it from the southward; but we perceived that the waters in it ran north-easterly, which gave us strong hopes of soon being enabled to head it. Several times in the course of the day we attempted to descend on foot; but after getting with much difficulty a few hundred yards, we were always stopped by perpendicular precipices. Scarcely a quarter of a mile elapsed without a spring from the top of the ridge crossing our track, forming at its entrance into the main glen a vast ravine. The ridge along which we travelled was, as might be expected, very stony. It was otherwise open forest land, thickly timbered with large stringy bark trees, casuarinæ, and a large species of eucalyptus. Kangaroos abounded on it, and the tracks of emus were also seen.

September 13.—We were too anxious to find a passage across this river (for such we now perceived it to be), to permit us to

rest this day. We proceeded on a variety of courses to avoid the deep ravines or glens which conducted numerous small streams of water to the principal one. Our road was very rugged, and our elevation sometimes very considerable, every part heavily timbered. Our course, which led us chiefly west, now terminated at one of the most magnificent waterfalls we had ever seen. The water was precipitated over a perpendicular rock at least one hundred and fifty feet in height in one unbroken sheet, falling into a large reservoir about one third down the whole declivity: hence it wound its way through the glen for about half a mile farther, when it joined the main stream. This grand fall was called Beckett's Cataract, in honour of the Judge Advocate General. It now commenced raining so heavily that we were obliged to stop on the spot, though by no means an eligible situation. We had not seen any place where there had been the slightest possibility of descending; but as we were not many miles from the river which we crossed on Wednesday last, we knew that this rugged country must soon end.

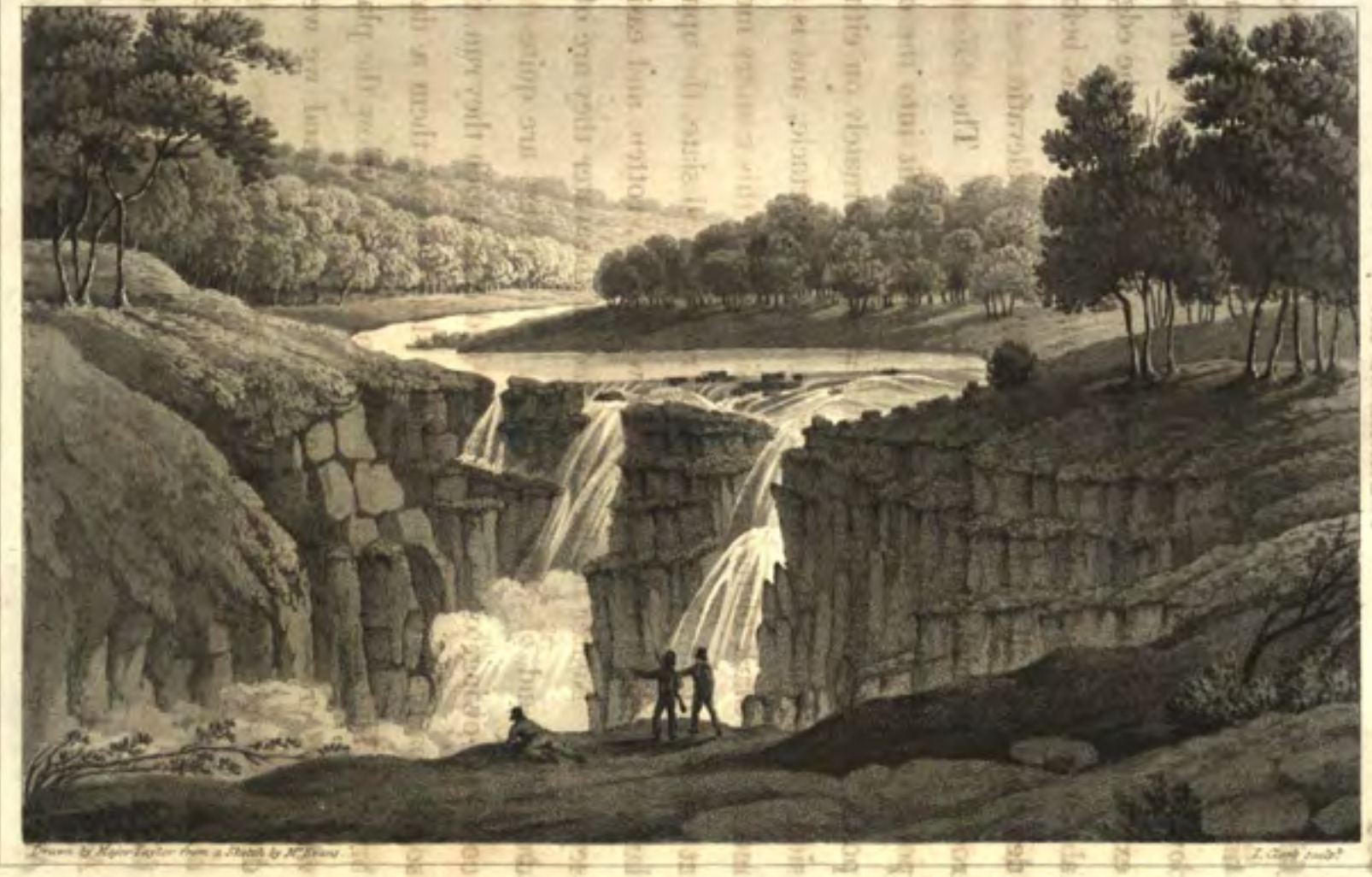
September 14.—The weather preventing us from proceeding, parties were sent out to search the banks of the glen, for a place by which to descend and cross it. Two of the people traced it up so far as to ascertain that the river which we had crossed on Wednesday was the same which had so embarrassed us. It entered the glen in a fall of vast height: above, there was no dif-

ficulty in crossing it, the country being clear and open, and of moderate height. A kangaroo was chased to this fall, down which he leapt and was dashed to pieces; like the hero of Wordsworth's "Hart leap Well." It is wonderful that the dogs escaped the same fate. We had been also successful in finding a passage nearer to the tent. About a mile above Beckett's Cataract, a pass was discovered by which we might descend, and the opposite side appeared equally favourable. It appears that we have been hitherto deceived respecting the magnitude of the river which runs through the glen, owing to the vast height from which it was viewed, and to our being seldom within a mile of it. The geologist would here have a most interesting field for research, and would doubtless be enabled to account for those natural phenomena, which, from their defiance of all rule, perplex us so greatly. These mountains abound with coal and slate. The dip of the rocks on this side (the north) of the glen, is about twenty degrees to the west.

September 15.—We first attempted the pass nearest to us, and which was reported to be practicable. The horses with tolerable ease descended the first ridge, which was about one third down; but it was impossible to proceed a step farther with them: indeed we had the utmost difficulty to get them back again. Three of them actually rolled over, and were saved only by the trees from being precipitated to the bottom. Quitting

this place, we proceeded up the glen, into which many small streams fell from the most awful heights, forming so many beautiful cascades. After travelling five or six miles, we arrived at that part of the river at which, after passing through a beautiful and level though elevated country, it is first received into the glen. We had seen many fine and magnificent falls, each of which had excited our admiration in no small degree, but the present one so far surpassed any thing which we had previously conceived even to be possible, that we were lost in astonishment at the sight of this wonderful natural sublimity, which perhaps is scarcely to be exceeded in any part of the eastern world. The river, after passing through an apparently gentle rising and fine country, is here divided into two streams, the whole width of which is about seventy yards. At this spot, the country seems cleft in twain, and divided to its very foundation: a ledge of rocks, two or three feet higher than the level on either side, divides the waters in two, which, falling over a perpendicular rock two hundred and thirty-five feet in height, forms this grand cascade. At a distance of three hundred yards, and an elevation of as many feet, we were wetted with the spray which arose like small rain from the bottom: the noise was deafening; and if the river had been full, so as to cover its entire bed, it would have been perhaps more awfully grand, but certainly not so beautiful. After winding through the cleft rocks about four hundred yards, it again

falls in one single sheet upwards of one hundred feet, and continues in a succession of smaller falls about a quarter of a mile lower, where the cliffs are of a perpendicular height, on each side exceeding one thousand two hundred feet, the width at the edges about two hundred yards. From thence it descends as before described until all sight of it is lost, from the vast elevation of the rocky hills which it divides and runs through. The different points of this deep glen seem as if they would fit into the opposite fissures which form the smaller glens alternately on either side. The whole is indeed a grand natural spectacle, and is an indubitable mark of the vast convulsions which this country must at one period have undergone. The rocks are all slate, the upper laminæ of which are of a light brown colour, rotten, and easily separated. Nearer the base or surface of the water they are of a dark blue, and of a firmer texture. The waters are quite discoloured, owing to the nature of the bed over which they run, the soluble particles of coal among the slate tinging them a dark brown. This fine fall is not more than five miles below the place where we crossed the river on the 9th instant, and we were doubtless prevented from hearing the noise of the waters, by the numerous smaller falls in the vicinity. This most magnificent fall and the river itself were respectively named Bathurst and Apsley, in honour of the Noble Secretary of State for the colonies. Although a week had elapsed in effecting the passage of this river,



BATHURST'S FALLS.

we could not consider it as entirely lost, especially as it enabled us to ascertain that its direction was to the coast; and we hoped that the nature of the country would permit us to fix its embouchure.

September 16.—The weather for some days past has been very unseasonable, cold and tempestuous, with frequent heavy and continued showers of rain: this remarkable coldness of temperature in such a latitude (31 degrees,) I cannot but attribute to the considerable elevation of the country above the sea, being certainly between four and five thousand feet. We proceeded to the south-east during this day's journey, on purpose to avoid the broken land in the vicinity of the river. It was good travelling though hilly: the soil, for the most part, a poor clay; and the timber not so good or large as usual. There was however much good land, particularly in the valleys, through every one of which a stream of water took its course to the river. At twelve miles, we halted on the banks of a considerable and rapid stream watering an extensive and wide valley. The many waters which fall into Apsley River must very considerably increase its magnitude; and I am in hopes after it has cleared this mountainous tract and we again fall in with it, that we shall find it a useful as well as fine stream. The river on which we encamped was named Croker's River, in honour of the First Secretary of the Admiralty.

September 17.—We proceeded on an easterly course during this day's journey; and seven miles from Croker's River crossed

a smaller stream running to the north-east. For the first ten miles the country was very poor and badly timbered, with barren stony hills; but from the last mentioned stream to our halting-place, at the end of twelve miles, though the land was hilly the soil was excellent, consisting of a rich, dark mould. The hills were particularly rich and thickly clothed with fine timber, blue gum, and stringy bark. We halted on the side of a hill, from the top of which we could see a great distance to the north and east. In the first quarter, lofty hills were seen from eighty to one hundred miles off, and generally very irregular. To the east the land was elevated, but more divided by sloping valleys, and we augured that at least for thirty miles in the direction of our course, we should not meet with any such serious obstruction as the last: indeed we imagined we could trace the course of the river nearly on a parallel line with us. We this day saw a solitary native, but I believe we were indebted for the sight rather to the circumstance of his being deprived of the use of his limbs than to his boldness or curiosity. Two or three families had been encamped on the spot where we found him, but they had all departed. He seemed more astonished than alarmed at the sight of our cavalcade, and expressed his wonder in a singular succession of sounds, resembling snatches of a song. His countenance was mild and pleasing, and was entirely divested of the ferocity we had seen expressed in the visages of some of his countrymen: he

A NATIVE CHIEF OF BATURST.

Published Feb.1.1821 by John Murray Albemarle Street London

had lost the upper front tooth, and I think it was probable that he had heard of such beings as ourselves before. He was a miserable object: several ribs on his left side had been broken; his back was twisted, which apparently had been the means of depriving him of the use of his limbs, as no injury could be discovered about them.

September 18.—During the night and this morning it has continued to blow a perfect equinoctial storm. We were in constant dread that some of the branches of the trees which surrounded us would fall on the tent. Proceeding on our course to the east north-east, we did not advance above a mile and a half before a small stream running to the north-east through a very steep and narrow valley obliged us to alter our course more southerly, which we did, and soon entered a forest of stringy bark and blue gum trees of immense size and great beauty. The soil on which they grew was a rich vegetable mould covered with fern trees* and small shrubs. We found that this part of the country was intersected by deep valleys, the sides of which were clothed with stately trees, but of what kind we were ignorant: creepers and smaller timber trees, all of species not previously noticed by us, grew so extremely thick that we found it impossible to penetrate through them. We therefore continued along

* Alsophila australis of Brown.

the edge of those valleys, our progress much impeded by the vast trunks of fallen trees in a state of decay, some of which were upwards of one hundred and fifty feet long, without a branch, as straight as an arrow, and from three to eight and ten feet in diameter. The forest through which we travelled appeared to be an elevated level or plain, and at three o'clock in the afternoon, after proceeding three or four miles to the westward, we cleared this truly primeval forest, and descended into a small valley of open ground, through which ran the stream we had crossed in the morning. Indeed we were not more than two miles south of the place we had quitted. Our hope of proceeding without much interruption was thus disappointed: the gloominess of the weather, and the constant showers that fell, so impeded our view and distorted its objects, that what appeared plain and practicable at a distance of two or three miles, when approached was found impassable. I think it probable, however, that our most serious obstructions will be the thickness of the timber, rotten trees, and creeping plants; the soil is so rich and free from rocks, that I do not think the steepness of the descents will greatly endanger us. The wind, which had been extremely violent all day, was now accompanied by heavy showers; and we thought ourselves extremely fortunate in not being obliged to encamp in the forest. The storm as the evening advanced increased to almost a hurricane, with torrents of rain. Since Apsley River had been

ascertained to take a direction coastwise, the principle which governed the direction of our course had been to endeavour to make a port on the coast laid down in lat. 30. 45. S., and which I had an idea might probably receive this river, now increased by a multitude of smaller streams, and if so, that it might serve as a point of communication with the fine country in the interior. It is true this port is marked as a bar harbour; but I knew that it had never been examined, and I was aware how possible it was for a harbour to appear closed by a reef from a ship sailing at a distance along the coast. At all events the point was worth ascertaining; and notwithstanding the repeated disappointments we had experienced in attempting a north-easterly course, I shall, if we are enabled to clear the deep valleys we are at present embarrassed with, persevere for some time longer. I consider it every way important to know into what part of the coast these waters are discharged.

September 19.—The storm continued to rage with unabated violence throughout the night and the whole of this day, accompanied by torrents of rain and hail: the weather was also extremely cold and bleak; the thermometer in the mornings and evenings being not more than 5 or 6 degrees above the freezing point: indeed, the season much nearer resembles the winter of a far more southern latitude than the spring of lat. 31.

September 20.—Towards the morning the storm abated, but

throughout the day it was dark and gloomy, with passing showers. In the present state of the weather we did not think it prudent to attempt penetrating through the thick forests which we knew were before us, and our horses would be the better for rest. The botanical collector descended into one of the valleys nearest to us, and found the sides of it clothed with the timber before mentioned: it was quite new to us. Some of the flower and seed were procured, as it was generally found in full flower, which gave these stately trees a richness and beauty I had never seen equalled. A great variety of other equally interesting plants was also found, some of them new species of timber. The valleys were of the richest soil, having a small run of water in their bottoms. Observed the variation by evening azimuth to be 10. 39. E.

September 21.—With a severe frost, the morning and day were finer than usual, though the weather was very unsettled. We accomplished seven miles on a south-east by east course, through a very heavily wooded country; the timber generally of the best description, and the soil, with some partial exceptions, was equally good and rich. It was, however, so thickly covered with ferns and bushes among the trees, with vines running from them, that in many places we found it difficult to pass. Our course was accidentally such as to avoid all the deep valleys but two, the descents of which were extremely difficult. In them strong streams of water ran to the north-east, no doubt joining the main

river. From the hill over one of the streams near which we halted the coast line of hills was plainly seen; and we appeared to have but a rugged journey before us. Our horses too were so extremely weak and crippled, that the short distance we are enabled to travel is accomplished with pain and difficulty. We were forced to leave one of them about a mile and a half from our resting-place, as he was utterly unable even to walk without his load, which was distributed among the others. Some natives' fires were seen about two miles to the north-east of us in the same valley.

September 22.—A dark tempestuous morning. Sent back for the horse we left yesterday afternoon: he was somewhat recovered, and may perhaps live to reach the coast—the point whither our hopes have long pointed, and where I trust the horses will experience some relaxation from their present incessant but necessary labour. We had no choice in the route we pursued this day, taking that which appeared most practicable for men and horses: it was a continued ascending and descending of the most frightful precipices, so covered with trees and shrubs and creeping vines, that we frequently were obliged to cut our way through: at the bottom of one of these, we left the sick horse in a dying state. To add to our perplexities, it rained incessantly, and was so thick and dark, that towards evening it was with difficulty we could see sufficient of our way to avoid being dashed to pieces. About two hours before sunset, after a

descent of upwards of five thousand feet, we found ourselves at the bottom of the glen, through which ran a small stream; but a passage down it was impossible, as it fell over rocky precipices to a still greater depth. The opposite side was a mountain equally steep with the one we had just descended. The horses were also so weak that it was impossible they could take their loads up it, and there was no possibility of remaining on the spot, since there was neither grass nor room even to lie down. All the heavy baggage was therefore obliged to be left behind, and by unremitted exertion we were enabled to gain a small spot of ground, formed by the mountains retiring from the immediate descent to the gulf below. It was, however, near eight o'clock before this was accomplished; and we were after all obliged to leave two of the horses below, as all our attempts to move them were fruitless, even when unladen; a circumstance which we lamented the more, as they were on a spot that did not afford a blade of grass. The rain ceasing, was succeeded about nine o'clock by one of the severest storms of wind I ever remember to have witnessed; and for the first time perhaps during the journey, we were alarmed for our personal safety. The howling of the wind down the sides of the mountain, the violent agitation of the trees, and the crash of falling branches, made us every instant fear that we should be buried under the ruins of some of the stupendous trees which surrounded us.

September 23.—Towards midnight the storm abated, and al-

lowed us to pass the remainder of the night in comparative comfort. The morning broke fair, and as the state of the horses would not permit us to attempt ascending the mountain with the baggage to-day, I contented myself with despatching them for the provisions left last night at the bottom of the precipice, and to get up if possible the two remaining horses, whilst Mr. Evans and myself should explore the range, and endeavour to find out a somewhat more practicable route. We proceeded to ascend the mountain, the summit of which was near two miles distant, and in many places extremely difficult and abrupt. We however remarked on our road seven native huts, which increased our hopes that these mountains would lead by a comparatively easy descent to the coast line of country. Bilboa's ecstacy at the first sight of the South Sea could not have been greater than ours, when on gaining the summit of this mountain, we beheld Old Ocean at *our feet*: it inspired us with new life: every difficulty vanished, and in imagination we were already at home. We proceeded sufficiently far to discover, that although our descent would be both difficult and dangerous, it would not be impracticable. The country between us and the sea was broken into considerable forest hills and pleasing valleys, down the principal of which we could distinguish a small stream taking it course to the sea. To the north and south the country was mountainous and broken beyond any thing we had seen. Indeed, some idea of those barrier moun-

tains may be formed from the circumstance, that although we could distinctly see the ocean, and the waving of the coast line, (which within the distance of ten or twelve miles from the beach appeared low), yet we were still nearly fifty miles from it. I estimated the height of this mountain at between six and seven thousand feet; and yet the country north and south appeared equally elevated. Numerous smokes arising from natives' fires announced a country well inhabited, and gave the whole picture a cheerful aspect, which reflected itself on our minds; and we returned to the tents with lighter hearts and better prospects. In removing the baggage left at the bottom of the hill a short quarter of a mile, a most distressing accident occurred. A mare, one of the strongest we had, in bringing up a very light load, not a quarter of her usual burden, and when within one hundred yards of the tent, literally burst with the violent exertion which the ascent required. In this shocking state, with her entrails on the ground, she arrived at the tent, when, to put an end to her agonies, she was shot. This was a serious loss to us, in addition to that which we suffered on the day before: and three more horses were so worn, that I scarcely expected to force them along even unladen. It must not be supposed that we attempted to climb these hills in a direct line; it would have been scarcely possible for a man to do it: we wound round them in every practicable direction; and the loose

rich soil of which they were generally composed, together with the thickness of the timber, by preventing our falling, favoured our progress. In the course of the afternoon I tried the angle of elevation and depression on various parts, and found it to be from 30 to 35 and even 40 degrees. By the same means we found that the mountain which we had descended yesterday evening exceeded four thousand seven hundred feet in height on those angles. The mountain we shall have to ascend to-morrow is very considerably higher; but, with one or two exceptions, the ascents are not so abrupt. After the provisions were brought up, all hands were sent to cut a road for the horses through the brushes which surrounded the bottoms of the steepest ascents, and without which it would have been impossible for them to pass laden; the vines which crossed each other in various directions forming an almost impenetrable barrier. It may seem superfluous to speak of soil and timber among such mountains as these; yet I will say that except where the rocks presented a perpendicular face, and along the highest ridges, the soil was light and good. The timber consisted of blue gum and stringy bark, and forest oak* of the largest dimensions: the gorges of the valleys were covered with loose small stones, and in those gorges all the trees which are usually found in places of a similar

* Casuarina torulosa.

description in the district of the Five Islands (with the exception of the red cedar), were to be met with. The stones and rocks were mixed with a considerable portion of quartz, and were generally in loose detached masses of various sizes. The mountain from whence we first saw the ocean was named Sea View Mount, and I should think might be distinctly seen by ships at some distance from the coast.

September 24.—At eight o'clock the horses began to ascend the mountain, and it was twelve before we reached the summit—a distance of exactly two miles. How the horses descended I scarcely know; and the bare recollection of the imminent dangers which they escaped, makes me tremble. At one period of the descent, I would willingly have compromised for a loss of one third of them, to ensure the safety of the remainder. It is to the exertions and steadiness of the men, under Providence, that their safety must be ascribed. The thick tufts of grass and the loose soil also gave them a surer footing, of which the men skilfully availed themselves. The length of the descent was two measured miles and three quarters, and upon first, an angle of depression of 40 degrees for one thousand two hundred and fifty-four feet: we then slightly ascended 4 or 6 degrees for four thousand six hundred and twenty, and from thence the descent, in a continued straight line, to the run of water at the base, was on the various angles of 28, 32, 35, 40, and 46 degrees, eight thou-

sand five hundred and eighty feet; from whence I deduce the perpendicular height to be nearly six thousand feet, which is certainly underrated. The descent terminated in a very narrow steep valley, down which we proceeded for near three quarters of a mile, when the small stream before mentioned joined a very considerable one seen yesterday from Sea View Mount; and the valley opening, we halted on the banks of the river on a spot which afforded us plenty of excellent grass, and was in other respects favourable for that rest which the horses required before they could resume their journey. One of the horses when about a third down the mountain was quite incapable of proceeding, we therefore were obliged to leave him for the night, with the loads of two other horses. It was past four o'clock before we arrived at our halting-place, having been exactly three hours and a half in descending.

September 25.—Despatched the men to bring down the horse and the baggage left on the mountain yesterday. They returned in the afternoon with both, but the horse was scarcely able to stand. In the course of the day examined the valley a few miles, when we found that it opened considerably four or five miles down; the hills previously thereto being very steep, but covered with grass, and abounding with kangaroos. It was therefore determined to move farther down the river to-morrow, instead of remaining here two days as originally proposed. In the present

reduced state of the horses, we were obliged to make short stages with frequent halts, in hopes of sufficiently recruiting their strength so as to proceed with greater expedition along the coast.

September 26.—We proceeded between four and five miles down the river, which was named Hastings River, in honour of the Governor General of India; the vale gradually opening to a greater width between steep and lofty hills, the soil on which was very stony, but rich, and covered with fine grass two or three feet high. At the place where we stopped, small rich flats began to extend on either side, and confirmed our hopes that we should find a more regular country as we approached the sea. The route which we had travelled lay over steep and sharp points of mountains ending on the river, but did not offer any great obstruction. Yet we were obliged to leave the horse which had failed the day before, half-way, as he dropped through utter weakness, though unladen. These valleys and hills are astonishingly rich in timber of various kinds, many new, and their botanic supplies were inexhaustible. Indeed our cargo now principally consists of plants.

September 27.—The morning fine and clear. Sent back for the horse left yesterday, which with some difficulty was brought to the tent. Observed our latitude to be 31. 23. 10. S., longitude by estimation 152. 8. E., variation 8. 22. E. We this day cleaned all the arms, and put our military appointments in order

to guard against any hostile attempts that might be made by the natives, who are reported to be in this quarter numerous and treacherous.

September 28.—As we proceeded down the river, the vale still continued to open on either hand, the hills receding from each bank of the stream from two to three miles. The land on the more elevated spots, and irregular low hills, was strong but of good soil, covered with grass: the flats which occurred alternately on both sides of the river were very rich, the grass long and coarse; the timber, blue gum and apple tree. As the points of the higher hills sometimes closed on the river, we found it convenient to cross it, which in the course of the day we did no less than three times. In the hollows of the higher hills were thick brushes of the same description as those at the Five Islands. About six miles and a half down the river it was joined by a considerable stream from the northward, running through a fine and spacious valley. The accession of this water materially altered the appearance of the river, as it began to form long and wide reaches, with alternate rapids over a shingly bottom. The northern stream was named Forbes's River, in honour of the Marquis of Hastings' nephew. Although our proximity to the sea seemed to preclude the probability of Hastings River being joined by any other considerable waters; yet its present size made us a little anxious to find that it had a serviceable discharge

into the ocean. The ground over which we travelled being very favourable to the weak state of the horses, we accomplished between eight and nine miles. Kangaroos abounded; four were this day killed. Marks of flood were observed to the height of sixteen feet, but the river appeared now to be in its lowest state, and the sides of the barren mountains showed that there had been no rain of any consequence for a considerable time.

September 29.—The country we passed through is what is generally known in New South Wales as open forest land, with occasionally small flats on the river: steep hills sometimes ended on the river, and north and south of us were detached ranges of a similar description. The whole face of the country was abundantly covered with good grass, which, having been burnt some time, now bore the appearance of young wheat. Six miles down the river it was joined by a fine stream from the southward, apparently watering a spacious valley. We crossed this, and named it Ellenborough River, in honour of the Chief Justice of England. We proceeded about three miles farther before we halted at the edge of a thick detached brush*, which came nearly down to the water's edge. In this brush was a

* Many very beautiful shrubs inhabit these shaded thickets, of which the following may serve as a specimen. Tetranthera dealbata, Brown's *Prodr.*; Cryptocarya glaucescens, Br., genera of laurinæ. The Australian sapota fruit, Achras australis, Br.; Cargillia australis, a date plum. Myrtus trinervia of Smith, and Ripogonum album, Br.

quantity of fine red cedar trees, affording us reason to hope, that this valuable wood might, as we advanced to the coast, be found in yet greater abundance. The timber generally might be termed heavy, consisting of blue gum, stringy bark, and iron bark, with fine forest oaks. The stones on the surface of the land were hard and splintery, being principally of coarse quartz; some hard sandstone was also seen: the rocks in the river were of a fine dark blue colour, singularly hard and slippery. Although we had seen no natives, there were abundant signs of them. This season probably is better calculated for them to procure their food on the coast than in the woods.

September 30.—Our progress this day was greatly impeded by thick brushes, which, covering the sides of the hills, ended on the river: some of them were upwards of a mile in extent, and we were obliged to cut a road to enable the horses to pass through them. There were several rich flats on both sides of the river; the hilly projections ending alternately at the several bends of the stream. The obstruction offered by the brushes excepted, the road was nowise difficult: the hills were stony, with rocky summits: the river's course was over large rocks and pebbles; it was fordable in several places, with intervening deep reaches. It was late in the afternoon before we had accomplished six miles, and halting on a flat bounded easterly by extensive brush, I resolved to cross the river. There appears to be plenty of fish

in it; we caught six fine perch, weighing above two pounds each, in a very short time. The timber continues heavy and good: we saw however but little cedar after passing the first brush.

October 1.—Our travelling to-day was nearly the same as yesterday. The windings of the river were very sudden, and its banks were most generally covered with a thick brush, which in some places extended back a considerable distance. Between those brushes the ground was open forest with good grass, casuarina or beefwood, and large timber: the hills as usual stony. Near our halting-place a remarkable rocky range of hills was seen to the east-south-east of great height, and presenting nearly a perpendicular front to the north-west. Between east-north-east and east by south, with the imperfect view which we could obtain from the low hills we were traversing, it appeared but slightly broken, the higher ranges breaking off to the north-east and south-east, leaving a spacious valley through which we conjectured the river flowed. Near us were a few cedar trees, and marks of flood exceeding twenty feet, but confined to the bed of the river. On the whole we accomplished near eight miles, but scarcely five were in the direction of the sea, which we still estimate to be from twenty to twenty-five miles distant in a direct line.

October 2.—In order to avoid the brushes, which lined the banks of the river, we kept at some distance from it to the south,

which led us under the high rocky peaked hill mentioned yesterday. Our road was however by no means bettered, and I afterwards regretted that I did not keep close to the river. It is proper to mention that the brush land is of the richest description, being composed entirely of vegetable mould, the produce of decayed trees for ages: it is singularly well watered; every little valley has its run to the river. A great deal of cedar was seen to-day, and the more common timber was very large and good; the forest ridges between the brushes were well clothed with grass. We have hitherto seen no natives, though they are certainly numerous, as their frequent recently deserted camps witness: we are not very anxious for better proof. The leeches in the bushes were very troublesome, and made many plentiful meals at our expense: this would probably have done us no great harm, but the wounds which they made usually festered and became painful sores. Our botanical collector ascended the peaked hill on our left, and had a most extensive prospect. The river, winding a few miles below our station of this evening, was distinctly seen to the coast, which he did not estimate to be above fifteen or eighteen miles off. The account which he gave of the interesting prospect, and the circumstance of its being the only eminence between us and the coast from whence any object could be distinguished, determined me to ascend it the ensuing morning, and ascertain the principal points in this beautiful country. We

travelled this day in the whole near six miles in an east-south-east course, the horses being very weak, and a road being to be cut for them nearly the whole way, the last mile excepted, which was open forest land.

October 3.—Soon after daylight, accompanied by the botanist, I returned to the peaked hill, leaving the horses with Mr. Evans to proceed to the north-east. Certainly a more beautiful and interesting view is not often seen. The spacious valley, through which the river flowed, extends along the coast from Smoaky Cape to the Three Brothers, and its width north of me was above eight miles, gradually narrowing to the base of Sea View Mount where we first entered it, and which bore west by north. Wide and extensive valleys stretched to the west-south-west, and south-south-west, under its base on either side, the hills in which were of moderate height, and of open forest land. To the north by east, though high land was seen at a distance of near sixty miles, the general face of the country was low with moderate and regular elevations, the highest lands being immediately behind the capes and projecting points into the sea. But the object that most interested me in this extensive survey was the appearance of the river: at a distance of seven or eight miles north-east of me, it opened into wide reaches extending to the sea, which it seemed after a winding course to enter nearly east, or in about the situation assigned by Captain Flinders to a lake across

the entrance of which there appears to be a bar. The country on its banks, and within the limits before mentioned, appeared very brushy and low; the banks themselves seeming to be the highest ground. I conjectured that the river's extending itself to such a considerable breadth, was probably caused by the tide-water; and I could not help entertaining the strongest hope from its appearance that it would prove navigable, whatever its entrance might be. To the north of the river, a few miles from it, appeared lagoons, or swamps, probably having some beach communication with the sea. Another large lake was also seen to the south-east, under the Three Brothers. Several other small patches I thought might possibly prove to be marshes between my station and the coast; the country in its immediate vicinity appearing too low to afford drainage. Descending the hill, I proceeded after the horses, passing for nearly three miles through a good open forest country; the timber large, with numerous casuarinæ. At the entrance of a brush I met the horses returning, having been prevented from continuing their easterly course by a large tea-tree swamp, full of water. We therefore pursued a more northerly course, with the hope and intention of making the river near the wide reaches, which I had seen from the hill. From the forest land we immediately entered a thick brush, and after cutting our way for near two miles, the evening advancing, I thought it best to send back the horses to the forest land,

where there was plenty of grass, and proceeded myself with some men to cut the road to the river; an object, which in about another mile we effected. We happened to make it near the spot wished for. The tide was going out, the water having fallen near three feet; though not perfectly good it was drinkable, and would doubtless be sweet at low-water. A small island here divides the river into two branches: below the island the water appeared very deep, as did also the north side of the island. Its breadth might be nearly a quarter of a mile; both banks were very thick of brush, and the soil rich. About three quarters of a mile down the reach, the bank on the southern side appears to become a little more open, and, as I intended halting to-morrow, I determined to cut a road to it, and clear the way as far as possible down the banks before we proceeded on Monday. Our distance from this spot to the coast line did not exceed eight or ten miles. It was nearly dark before we returned to the place which we had fixed to encamp on, amidst abundance of fine grass and good water.

October 4.—We could distinctly hear, during the night, the murmurs of the surf on the beach, and the sound was most grateful to our ears, as the welcome harbinger of the point to which eighteen weeks of anxious pilgrimage had been directed. I accompanied the men who had been appointed to cut the road along the banks of the river. We had performed about a mile

when we were stopped by a large stream from the southward. It was therefore necessary to carry the road along the banks, which we did for nearly two miles, when we left off for the day and returned to our tent. I caused the main branch of the river to be sounded near the junction of the southern branch which I had named King's River, (after my friend who is now surveying the coast of this continent), and found, at one-third ebb, four fathoms. King's River appeared equally deep, and was about one hundred yards broad—the water at this time of the tide brackish: the country covered with brush, the soil very rich; and a few cedar trees were scattered among the other timber. The vines were of enormous size, and in many instances had entirely enveloped the trees to which they had attached themselves, a small part of their trunks only being here and there visible.

October 5.—Sent a party to cut the road up King's River. After advancing between four and five miles, a small piece of forest ground was discovered, which determined me to remove the horses and baggage thither, since the distance which the people had to go to their work occasioned much delay. A great many natives' canoes were seen on the river to-day fishing, and as the use of these canoes to cross King's River would have been very desirable, we endeavoured to tempt their owners to visit us, but without success; it being out of our power to make them understand our meaning.

October 6.—We set out this morning with an intention of proceeding up the west bank of King's River by the road already cut, but before we had arrived at it, two natives in a canoe were induced to cross over to us. Their vessel we detained, making them a present of a tomahawk. The moment they saw one of the horses (which happened to be a white one), descending the bank for the purpose of being unladen, they made signs expressive of their idea, that we were going to put the horses in the canoe, which they immediately quitted and swam to the opposite shore. As it was extremely probable that many smaller branches would fall into King's River, I determined to cross it at its mouth, and so proceed along the banks of the main river. It was two o'clock before we had got every thing over, when, upon examining the road which we had to travel, we found that about half a mile lower down another small stream joined the river. To this latter stream we therefore cut a road, keeping the canoe for farther use. By its means we found that after we should cross this last stream, we should get into an open forest country, with good grass: and we hoped that we should meet with no farther obstructions in our progress, which the thickness of the country and the intersection of streams rendered extremely tedious. The river at low-water was sufficiently fresh for us to drink. From the limited observations I was enabled to make, the depth at that time of tide was from two to three fathoms, and the rise of tide was five feet;

but the tides appeared very irregular, being evidently influenced by the great body of fresh water in the river. What land we saw or passed over was a rich vegetable mould; the brush extremely thick on both sides, with fine timber of various kinds. I do not think the higher forest ground was more than a mile or two back from us. King's River, and that which we shall cross to-morrow, are formed by numerous smaller runs of water from the valleys in the higher grounds to the southward and south-west.

October 7.—We crossed the small stream mentioned yesterday, by the help of our friendly canoe, in safety. The horses however having had little or nothing to eat the night preceding, I halted for a couple of hours to refresh them. The horse which had been so weakly, that nothing but the short stages we were obliged to make enabled him to keep up with us, in crossing the stream landed on a small muddy patch, dry at low water: here he fell, and all our efforts were unavailing to carry him to the forest-land, where I intended to leave him for the chance of recovery. To prevent a more lingering death, I now caused him to be shot. We afterwards proceeded near four miles, through an excellent open forest country, with low rising hills well watered, and plenty of good grass and timber. We halted near a large lagoon, deriving its source from springs in the valleys southerly and south-west, having an outlet to the river, which having bent considerably to the north-westward, we have not

seen since we quitted its banks this morning. The weather for some days back has been remarkably fine, and we find the brushes a great protection from the heat of the sun, which is now becoming very powerful.

October 8.—We proceeded on our course, passing over for upwards of three miles a good and open country: the river three or four miles north of us. We soon afterwards came to a very large fresh water lagoon on our left, several miles in circumference, with smaller branches from the valleys, which emptied itself into the river: its point of discharge we could not discern. At five miles we were stopped by a large run of fresh water, which, from its proximity to the sea, we conjectured fell into the lower part of the harbour. At this place we were obliged to construct a bridge, which we did by two o'clock, sufficiently large and strong to take over the laden horses. During the time we were thus employed, we heard the natives' call close to us; and, on being answered, they immediately presented themselves to the number of ten, taking great care to show us, by lifting up their hands and clapping them together, that they were perfectly unarmed. Seeing them not disposed to approach near us, I went towards them, when they all retired to a greater distance except three or four, among whom I recognised the young man from whom we had borrowed the canoe. I made them several presents of fish-hooks, and kangaroo skins, but could not get them to approach

within a hundred yards of us. After a short interval I left them, and mounting a horse, they on seeing me took to their heels and ran as for their lives. They were all handsome, well-made men, stout in their persons, and showing evident signs of good living. Crossing this run, we passed over an excellent and rich country; alternately thick brush and clear forest, with small streams of water for near four miles more, when, to our great joy and satisfaction, we arrived on the sea-shore about half a mile from the entrance of what we saw (with no small pleasure), formed a port to the river which we had been tracing from Sea View Mount. Thus, after twelve weeks travelling over a country exceeding three hundred and fifty miles, in a direct line from the Macquarie River, without a single serious fatality, we had the gratification to find that neither our time nor our exertions had been uselessly bestowed; and we trusted that the limited examination, which our means would allow us to make of the entrance of this port, would ultimately throw open the whole interior to the Macquarie River, for the benefit of British settlers. We pitched our tent upon a beautiful point of land, having plenty of good water and grass; and commanding a fine view of the interior of the port and surrounding country. I purpose to remain here until Monday, by which period I expect to be enabled to complete (as far as possible, without the assistance of boats), the examination of the harbour's mouth.

October 11.—Our time for these last two days has been

occupied in making a sketch of the entrance into the river, and, as far as our limited means would permit, in ascertaining its capability to receive small vessels. The entrance between the sand-rollers and over the bay appeared sufficiently deep for vessels whose draught of water might not exceed ten or twelve feet; and when within the bar, a deeper though narrow channel seemed to afford safe means of communication with part of the country traversed by us, on the 3d and 4th inst. The nature of the country in the immediate vicinity of this port and river has already been described; and should the channel, which, as far as we are able to judge, appears safe and sufficiently deep, hereafter prove to be so, I indulge the hope, that the knowledge we have obtained will be beneficial to the interests of the colony; and facilitate the settlement of a rich and valuable tract of country. The natives in the vicinity of the port appeared very numerous: they kept, however, on the other side of the harbour, and seemed by no means inclined to have closer communication with us. We however prevailed on four young men to come over; and by making them small presents of hooks, lines, &c., this shiness has soon worn off. They were evidently acquainted with the use of fire-arms; if any of the people took up a musket they immediately ran off, and it was only by laying it down that they could be prevailed upon to return, showing by every simple means in their power their dread of its appearance.

The port abounds with fish: the sharks were larger and more

numerous than I ever before observed in any place. We caught one very large one, which we offered to the natives, but they would not touch it, making signs that it would make them ill: our people however found no bad effects from eating it.

The forest hills and other rising grounds in the neighbourhood are covered with large kangaroos; and the marshes, which in some places border on the port, afford shelter and support to innumerable wild fowl. Independent of Hastings River, the whole country is generally well-watered, and there is a fine spring at the very entrance into the port.

I named this inlet, Port Macquarie, in honor of His Excellency the Governor, the original promoter of these expeditions.

October 12.—We quitted Port Macquarie at an early hour on our course homewards, with all those feelings which that word even in the wilds of Australia can inspire. We kept at a distance from the sea shore for nearly six miles; the country was exceedingly rich, the timber large with frequent brushes. Just before we came on the beach, we observed an extensive fresh-water lagoon, running for several miles behind the beach, bounded on the west by forest land of good appearance; a strip of sandy land about three quarters of a mile wide dividing it from the sea. At the back of Tacking Point rises a small stream of fresh water, which flows into the lagoon. The country is of moderate height. After travelling near fifteen miles, we stopped at the extremity of

a sandy beach on a point of good land, with an excellent spring of water rising on it, about four miles north of the northernmost of the Three Brothers. Tacking Point, bearing N. 25¼ E. Two of our remaining three dogs, had been for the last two days deprived of the use of their limbs: one died this morning; the other, we brought on horseback with us, willing, if possible, to save the life of a valuable and faithful servant. We conjecture that something they had eaten in the woods must have caused so universal a paralysis.

October 13.—Crossing the point of land on which we had been encamped, we came to a sandy beach, on which we travelled three miles and a half. At the end of it was an opening safe for boats, (and probably for small craft at high water), into an extensive lake. As we had no canoe by which to cross over, we were obliged to keep along its north shore with an intention of going round it. The lake formed a large bason with a deep channel, which as it approached the base of the northern Brother narrowed into a river-like form, and in the course of a mile it again expanded from the north-north-west to the south-west, to a very great extent. The land on its eastern side was low and marshy (fresh water). To the north and north-west, it was bounded by low forest hills covered with luxuriant grass; and to the southward and south-west extended along apparently the same description of country, nearly to the western base of the

Second Brother. The ranges of high woody hills laid down by Captain Flinders dwindle when approached into low unconnected forest hills. The Northern Brother, the highest of the three, is a long hill of moderate elevation, and is seen from such a distance in consequence of the other parts of the country being comparatively low. The timber was chiefly black butted gum*, stringy bark, turpentine tree, and forest oak†. The stones are chiefly a hard sandstone. On the lake were great numbers of black swans, ducks, &c. Various small inlets from the lake much impeded us, and after travelling near seven miles along its shores, we halted for the evening near a small spring of fresh-water, in a good rising grass country. The easternmost highest part of the North Brother was S. 4. W. From the observed amplitude of the sun at rising this morning, the variation was found to be 9. 33. E.

October 14.—We were considerably delayed in our progress this day by salt water inlets, which occasioned us much trouble to cross, and at length we were altogether stopped by a very wide and deep one, near the west end of the lake: it was too late in the day to take any measures for crossing it this evening; we therefore pitched our tents on the banks near a swamp of fresh water which borders on it and the lake, from which we were

* Species of eucalyptus. † Casuarina torulosa.

distant about one mile and a half. The inlet was brackish, and must have a considerable body of fresh water near its head. In our route we had disturbed a large party of natives, some of whom were busily employed in preparing bark for a new canoe. There were several canoes on the lake, in which they all fled in great confusion; leaving their arms and utensils of every description behind them. One of the canoes was sufficiently large to hold nine men, and resembled a boat; of course we left their property untouched, though we afterwards regretted we did not seize one of their canoes, which we might easily have done. We however determined to send back in the morning for the unfinished canoe, and try our skill in completing it for use. The ground passed over for the last six miles was hilly and very stony, but covered with excellent timber of all descriptions, and also good grass. There were plenty of kangaroos, but we had but one dog able to run; so that we succeeded in killing only a small one.

October 15.—A party was sent back early this morning to secure the canoe, while we examined the river. The people returned in the course of the forenoon unsuccessful, as the natives had removed it with all their effects in the course of the night, throwing down and destroying their gumiahs or bark huts. We also found that about a mile higher up the river, a branch from it

joined that which we last crossed about two miles back, making an island of the ground we were upon. The main branch continued to run to the north-north-west, and north-west. We therefore lost no time in returning part of the way to the entrance into the haven, (which we named after Lord Camden), where we proposed to construct a canoe. The natives seem very numerous, but are shy: we saw many large canoes on the lake, one of which would be quite sufficient for our purposes.

October 18.—On Friday we returned to the entrance of the haven, and immediately commenced our endeavours to construct a canoe: our first essays were unsuccessful, but by Saturday night we had a bark one completed, which we hoped would answer our purpose; though I think if the natives saw it they would ridicule our rude attempts. This morning, the ebb tide answering, we commenced transporting our luggage, and in three hours every thing was safe over. A very serious misfortune however occurred in swimming the horses across: two of them were seized with the cramp near the middle of the channel, one with difficulty gained the shore, the other sank instantly and was seen no more; he was one of our best and strongest horses, and even now their weak state can ill afford a diminution in their number. This haven appears to have a perfectly safe entrance for boats and small craft at all times of tide, except at dead low water with a strong surge from the eastward, when it slightly breaks, but is still

quite safe for boats if not for larger vessels. When we were in it, there appeared a safe and deep channel through the sand shoals which spread over it: the channel also appeared deep leading into the inner haven. There is plenty of fresh water in swamps, on almost every part of the shore on which we were. The higher lands abound with good timber, the points nearest the sea being covered with Banksia integrifolia, of large dimensions, fit for any kind of boat timber. It is high water full and change at ten minutes after nine, and the tide appears to rise between four and six feet. From a point near the entrance, several bearings were taken; and we also saw another large lake, or perhaps fresh water lagoon, under the southernmost of the Three Brothers. A sunken rock was also discovered off to sea, lying upwards of two miles from the next point southerly of us, and bearing S. 5. W.: a deep clear channel lies between it and the shore. At one o'clock we departed, and by sun-set had accomplished near fourteen miles of our journey. We saw the large lake under the Brothers from a high point on the coast very clearly, and found that on the north it was bounded by the North Brother, and separated from the sea by a strip of low marshy land about three quarters of a mile wide. This lake I think is a fresh water one: it was named Watson Taylor's Lake. The country west and southerly of the Brothers consisted of low forest hills; and a range of hills of moderate height, the entrance

of which bore west-south-west distant twenty or twenty-five miles, ended near Cape Hawke, the country being to that range very low with marshes. A strip of sandy land half a mile wide bounds the shore, on which is good grass and water. On the beach where we halted we found a small boat nearly buried in the sand, but quite perfect. It had belonged to a Hawksbury vessel, belonging to one Mills, which had been lost some time ago, and the crew of which perished. We halted on the beach, the South Brother bearing W. 32. N., and the Reef N. 53½. E., and which we now saw extended near three quarters of a mile north and south, and lying two marine miles from the shore. It appears dangerous, since in fine weather (as to-day) the north part of the reef only breaks occasionally.

October 19.—Proceeded on our journey up the coast: on attempting to cut off a point of land which would have saved us a distance of some miles, we found that the low part of the country was an entire fresh water swamp, interspersed with thick barren brushes, in all respects resembling the country between Sydney and Botany Bay. We therefore returned again on the beach, and crossing nearer to the point in question found the remains of a hut, which had evidently been constructed by Europeans, the saw and axe having been employed on it. About four miles farther on the beach, towards Cape Hawke, our progress was stopped by a very extensive inlet, the mouth of which was nearly

a mile wide. It was near high water, and the sea broke right across with tremendous violence, affording us little hope, circumstanced as we were, of being able to effect a passage. As we had always experienced the difficulty, not to say impracticability of attempting to go round such inlets as these, we stopped about half a mile inside the entrance, on a spot affording good grass and water for the horses, the greater part of which were entirely knocked up; insomuch that I began to fear we would take very few of them to Newcastle. It being early in the day, a party proceeded to explore the shores of the inlet, to ascertain if it was possible for us to proceed round it. After several hours' examination, and walking from six to eight miles, we were obliged to give up all intention of proceeding circuitously; and found that our efforts must be directed to effect a passage near the entrance, since numerous fresh water runs having their source in deep and impassable swamps or lagoons, presented an insurmountable barrier to the horses. The main inlet extended in two wide and extensive branches to the south-west and west, the termination of which could not be seen, the water being apparently deep; and the country to the westward rising into forest hills. In this perplexing situation, with no other prospect before us but that of effecting our own passage in a bark canoe, and being obliged to leave the horses behind us; since the width of the channel (which at low water we had the satisfaction to per-

ceive did not exceed a quarter of a mile) and the extreme rapidity of the tide, which ran at the rate of at least three miles per hour, precluded all reasonable hope that, in their present weak state, they would have strength to swim over. In this state, the boat which had been washed on the beach suddenly occurred to us. It was true that we were twelve or fourteen miles distant from it, and that we should have to carry her that distance on men's shoulders, but to persons in our situation such difficulties were as nothing. It was therefore determined that twelve men should depart before day, and use their efforts to bring her to the tent, whilst those that remained to take care of the horses and baggage should be preparing materials to give her such repair as must necessarily be required. We had now fully experienced how little dependance can be placed on the best marine charts, to show all the inlets and openings upon an extensive line of coast. Perhaps no charts can be more accurate than those published by Captain Flinders, the situation of the principal headlands and capes, with the direction of the coast, being laid down with the most minute attention to truth; but the distance at which he was obliged to keep, although it did not prevent him from laying the coast line down with an accuracy of outline sufficient for all nautical purposes, did not allow him to perceive openings which, though doubtless of little consequence to shipping, yet present the most serious obstacles to travellers by land; and of which, if

they had been laid down in the chart, I should have hesitated to have attempted the passage without some assistance from the seaward, or means wherewith to have constructed boats. From our station on the north shore of the inlet, the extreme of Cape Hawke bore south 7½. W., and the highest part of the Southern Brother, north 16½. W.: a break in the land between high ranges of hills bore west, and was distant from seventeen to twenty miles. Black swans are very numerous on this inlet: few marks of the natives having remained here for any time were observed, at least on this side; recent marks of two men having traversed the shore being all that were seen.

October 20.—At four o'clock the people set out to bring the boat, and at two o'clock they had brought her safely to the tent, having gone in that time upwards of twenty-six miles, thirteen of which they carried a twelve feet boat on their shoulders; a proof how much may be effected by a steady perseverance. In fact, I had no occasion to be anxious for the result of any measure which at all depended on their personal exertions. We had the satisfaction to find that the boat would be easily repaired, wanting little besides caulking and oars, and we did not lose a moment in commencing the necessary operations. It has blown a gale of wind from the south all day, the surge breaking across the inlet with extreme violence: within the bar the water is very deep, and in moderate weather at flood tides there is doubtless a boat passage over

the bar; for, notwithstanding the break, there appears a sufficient depth of water. Whatever channel there may be is on the north side of the entrance. I think, from the height of the rise of tide (between four and seven feet), and the rapidity with which it runs, that this inlet must penetrate a very considerable distance into the country; and probably the lake which we took to be fresh water under the two Southern Brothers, may be a principal branch of this lake. It appears to be high water at the full and change at about forty minutes after nine.

October 22.—Yesterday was employed in giving the boat such repairs as our means permitted. Before six o'clock this morning we had transported a good part of the baggage; when, the tide answering, we began towing the horses over, which we safely effected by half past eight. I consider the discovery of this boat most providential, for without its assistance we should never have been able to transport the horses: being obliged to cross near the entrance, the force of the tide and their own weakness would have swept them among the breakers, and they would consequently have perished. We lost no time *in* pursuing our journey up the coast, and had by four o'clock accomplished six miles, when, to our great mortification, another inlet barred our progress. The southerly gale, attended with incessant rain, had by this time increased to such a degree, that we could take no steps this evening to cross it. By the time the tents were pitched every thing

was drenched with rain; and I think we felt the cold it occasioned more severely than on any similar occasion. I should be of opinion that this inlet communicated with the one we last crossed, as branches from each take such courses as would, I think, cause them to unite. The last inlet was named Harrington Lake, in honour of the noble earl of that title.

October 23.—The storm continued through the night. Late in the morning we had intervals of fine weather, when all our strength was immediately despatched to bring up our little boat, as we found that we could not cross without its aid. When the people returned with the boat, it blew with such violence that we dared not venture to cross in her. We however moved a little nearer the point of entrance, to be more conveniently situated when the weather should clear up. The men voluntarily undertook to carry the boat on their shoulders until we should pass Port Stephens—a service, reduced as their strength was by constant exertion, I should have been unwilling to impose on them, however it might facilitate our future progress.

October 24.—The weather was so extremely unfavourable (blowing in violent squalls with almost constant rain), that it was near dark before we got every thing safely over. I had sent on in the morning to examine the beach for a few miles, and another inlet was discovered about four miles in advance. We named this lake Farquhar's Lake, after Sir Walter.

October 25.—From the southern point of entrance into this lake the following bearings were taken. The highest part of the South Brother, north 6. E.; ditto North Brother, north 18. E.; Cape Hawke, south 3. E. We set forward at our usual hour. At a mile along the beach we found the wreck of a small vessel, which was recognised to be the Jane, of Sydney, belonging to Mills, before mentioned as the owner of the boat in our possession. It being low water when we arrived at the lagoon seen yesterday, we crossed it at the mouth, without unlading the horses. We proceeded along the beach for six or seven miles farther, when we turned off to the westward to cut off a point of land, and entered an excellent rising forest country, with rich thick brushes, bordering the coast line. We travelled in the whole about nine miles and a half, and halted about three quarters of a mile from the beach, from a point of which (one mile south-south-east of us), we saw Cape Hawke bearing east 73. S., distant six or eight miles; and at the extremity of a long curving sandy beach, about six miles west of the same point, there was an opening which, from the appearance of the country, we thought might probably form a lake.

October 26.—Two miles and a half farther travelling brought us again on the beach, along which we went for near seven miles more, when the opening or lake seen from the point yesterday obliged us to make use of our boat. On the opposite side to us

we saw the wreck of the brig Governor Hunter, now nearly covered with sand, at high water the tide washing over her. We had got the horses and great part of the luggage safely over, and I was on the point of setting out to look for a place to turn the horses on (the immediate margin of the bay being a swampy brush); when an alarm was given, that the natives had speared one of the people. Previous to crossing, we had seen them in great numbers on the side opposite to us, probably to the amount of seventy of all ages; but on seeing us launch our boat, they got into canoes and went two or three miles farther up the lake, still keeping on the south side. On the north side we did not see any natives, and although on both sides of the lake we were prepared for them, had they shown themselves in numbers on the beach, yet all were not on their guard against individual treachery. One of the men, William Blake, had entered the brushes about a hundred yards from the rest of the people on the north side, with the design of cutting a cabbage palm: he had cut one about half through, when he received a spear through his back, the point of it sticking against his breast bone. On turning his head round to see from whence he was attacked, he received another, which passed several inches through the lower part of his body: he let fall the axe with which he was cutting, and which was instantly seized by a native, the only one he saw; and it was probably the temptation of the axe that was the principal incitement to the

attack. Blake was immediately put into the boat and sent over to the south side, where the doctor was, who fortunately succeeded in extracting both the spears; but from the nature of the wounds, his chance of recovery was considered very doubtful. It was so late before every thing was got over, that we were obliged to remain on the spot close to the wreck of the Governor Hunter. The natives before dark had assembled in great numbers, and we could count twelve or fourteen fires from their camps. United as we were, we had little to fear from their attacks, particularly in the night; and we remained so short a time at any place, that we did not give them time to make any concerted attack. The country west and south-west of this lagoon is rising forest land of pleasant appearance; but the shores are flat, with thick brushes and steep fresh water swamps. The lagoon itself is at low water nothing but a sand shoal, with narrow and shallow channels. The surf beats quite across the entrance, and though at high water a small vessel might beat over the bar, it would be a mere chance if she escaped being lost upon the sandrollers inside, the surf breaking with a flood tide and easterly wind full half a mile within the outer bar. The tides run near four miles per hour, and the rise is from five to eight feet. From the south side of the entrance into the lake the highest part of the North Brother bore north 15. E.; ditto of the South Brother, north 8. 10. E. The point of land of the bay northerly, distant seven or eight

miles north 8. 30. E.; and a high bluff point or projection southerly, north 163. 30. E.

October 27.—We did not make much progress this day, being greatly embarrassed by the thick brushes which border on the coast in the vicinity of Cape Hawke, and fresh water swamps near the edge of the lake. There was, however, a good deal of forest land, and the brushes grew in good soil. We halted in the afternoon, having gone only four miles (Cape Hawke bearing east distant two miles and a half), on a piece of forest land surrounded by brush, through which, however, in the course of the evening we cut a road to the beach, to the southward of Cape Hawke. From a hill on that line we saw that the lake was much more extensive than it was first supposed to be, reaching in a southerly direction to the base of the forest hills, which run a north-west line from the next point of south of Cape Hawke, and within a quarter of a mile of the beach. To the north-west we could trace it upwards of twenty miles, winding among forest hills and a generally fine looking country. The lake was studded with numerous islands of forest lands, the interior of the lake being apparently deep water with sandy beaches to the main and islands. The whole appearance of the lake was extremely picturesque and beautiful.

October 28.—This day's journey afforded tolerably good travelling, with the exception of the last two miles, when, quitting the

beach, we ascended a high hill over the lake, and again descended to a small bay under a point of land south of Cape Hawke, where we halted for the evening: having accomplished ten miles. Although we were obliged to halt the greater part of the day, the extreme heat of the weather, combined with the motion of the horse, rendered it impossible for our poor wounded man to proceed. From this point Cape Hawke bore North Peak on Ditto 357., highest part of the South Brother, N. 1. E.; North Brother, N. 7. E.; line of coast westerly, N. 306.; a point N. 328½ mile; ditto N. 136½. E.; ten or twelve chains islet of Sugarloaf Point, N. 168. The rocks off ditto, N. 173.; Sugarloaf Point, 174½.

October 29.—The coast projecting into bold and perpendicular headlands obliged us to keep at a distance from it, and travel over an elevated range, from whence we saw that an extensive series of lakes, probably forming one large one, continued at the back of the coast line nearly as far as Blackhead. At five miles we descended from the range on a small beach which terminated our day's journey; the nature of the coast line preventing us from travelling along it. I therefore went with two men to mark out a road for the horses to the beach on the south-west side of Sugarloaf Point. The line we were obliged to pursue, led us through a most miserable scrubby country, formed into irregular steep hills

of white sand, without a blade of grass, or herbage of any kind; but with abundance of small black butted gums, red gums, &c. We found the road across, to be too far for us to attempt this evening. Indeed it was near sunset when I returned to the tent. The natives are extremely numerous along this part of the coast; these extensive lakes, which abound with fish, being extremely favourable to their easy subsistence: large troops of them appear on the beaches, whilst their canoes on the lakes are equally numerous. In the morning their fires are to be observed in every direction: they evidently appear to shun us, and we have no wish for a farther acquaintance. When we stopped for the night, the lake was only separated from the sea by a narrow neck of sand, and at spring tides, with an easterly wind, it must be forced over it. This neck of sand appears likely to be occasionally washed away, and to form a shallow opening into this portion of the lake. Its principal entrance I expect to find southerly; we however observed no tides in it, which makes us conclude it will have but a shoal entrance. From this point, the Sugarloaf Point, and island of it in one, bore N. 14.½, and the direction of the lake was N. 275.

October 30.—We passed for five miles and a half through the country described yesterday, when we arrived on the beach south-west of the Sugarloaf Point. The rock off ditto bearing

N. 88. E.; Shoal off ditto, 120., and Blackhead, N. 212.½; we went nearly six miles farther on the beach, and halted near a rocky point for the evening. This beach was a peculiarly productive one to us; a great number of fine fish resembling salmon, had been pursued through the surf by larger fish, and were left dry by the retiring tide: we picked up thirty-six, and a welcome prize they proved to us. We had just got the tents pitched, when a number of unarmed natives appeared upon the hill near us, and among them a woman and a child. As they came in peace, so in peace were they received. They approached the tents without any hesitation, and in the course of an hour, their numbers amounted to upwards of thirty, men, women, and children. Most of these people seemed to have been at Newcastle, and appeared a friendly and peaceable set. We did all in our power to continue these good dispositions by shaving the men, cutting the hair of the children, and bestowing on them such little articles as we could spare; not without a hope, that our kindness might be of service to others, who might under different circumstances be thrown among them. They were so far from showing the least jealousy of their women, that every circumstance indicated that their favours might be purchased: however that may be, we did not avail ourselves of this privilege. Kindling their fires close to our tents, they seemed to have taken up their quarters for the night. The weather had appeared to threaten rain, and as they all de-

parted about ten o'clock, it was attributed to the circumstance of their being without shelter; and we expected a friendly visit from them in the morning. From this station, Blackhead bore N. 197.; and the island off Sugarloaf Point, N. 70. E. The peak over the north entrance into Port Stephens, N. 211.

October 31.—The rain of the night, still continuing in the morning, and the tide not being sufficiently low to let us pass round the head, we did not set off so early as usual. Dr. Harris and Mr. Evans had gone to bathe near the point, and within one hundred and fifty yards of the tent. Mr. Evans had already bathed and had began to dress himself, when four natives, whom we recognised as being among those whom we had treated so kindly yesterday, made their appearance with their spears in their hands, in the attitude of throwing them from the cliffs above. There was scarcely time to parley with them, when a spear was thrown at Mr. Evans, Dr. Harris having leaped down the rock into the sea, and escaped to the tent under its shelter. The spear fortunately missed Mr. Evans, and he likewise escaped with the loss of his clothes, by following the doctor's example. On the alarm being given they were pursued, but they had disappeared among the brush on the hill. This instance of their treachery redoubled our circumspection, and our situation here being favourable for their attacks, I determined to pass over the brow of the hill with the horses—a road which from its extreme steepness, I

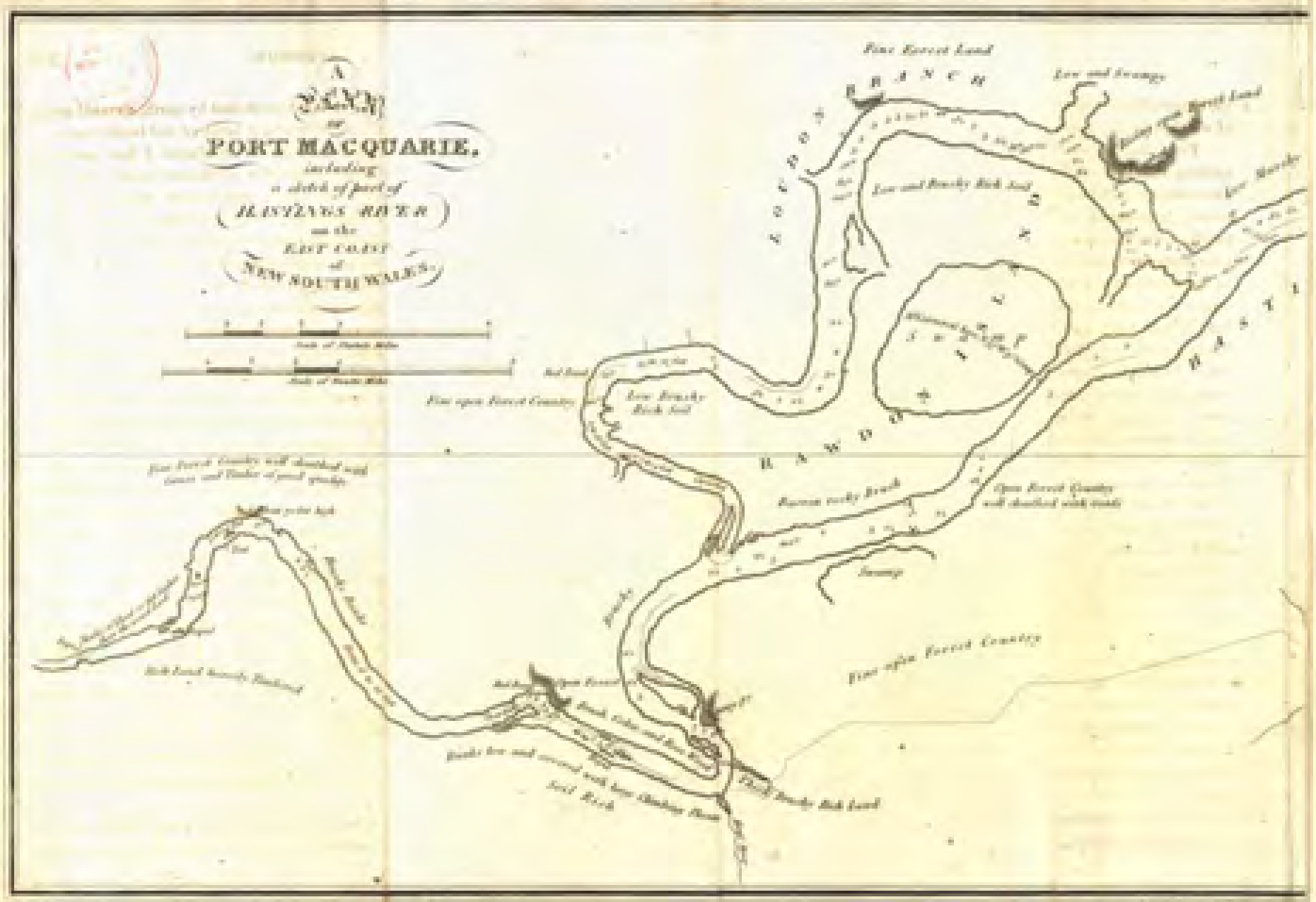
had been willing to avoid by waiting for the tide; and orders were given to collect the horses and proceed on our route. Whilst this was doing, and as I was sitting in the tent with Dr. Harris and Mr. Evans writing this Journal, a shower of spears from the height above was thrown at the tent, one of which passed directly over my shoulder, and entered the ground at my feet: the others lodged around the tent, and among the people who were getting ready the baggage, but providentially without doing any harm. We had stationed men to watch the hill, but the appearance of the natives and the flight of their spears was so instantaneous, that they had not time to alarm us. To enable us therefore to proceed in safety it was necessary to clear the hill, which was soon done; for on our ascending that hill, they took their station on another more distant. We travelled unmolested along the beach for upwards of twelve miles, when we halted for the evening on a small point of clear land, which at high water was an island. Here we found ourselves secure: we had however but just unladen, when three natives were seen coming along the beach from the side of Port Stephens. We knew that the party which had behaved so treacherously had gone that way, and we suspected that these men were sent to see whether we were disposed to resent their conduct: they appeared unarmed, each holding up a fish as a peace offering to us: but when they were within three hundred yards of us, they stopped, and not receiving

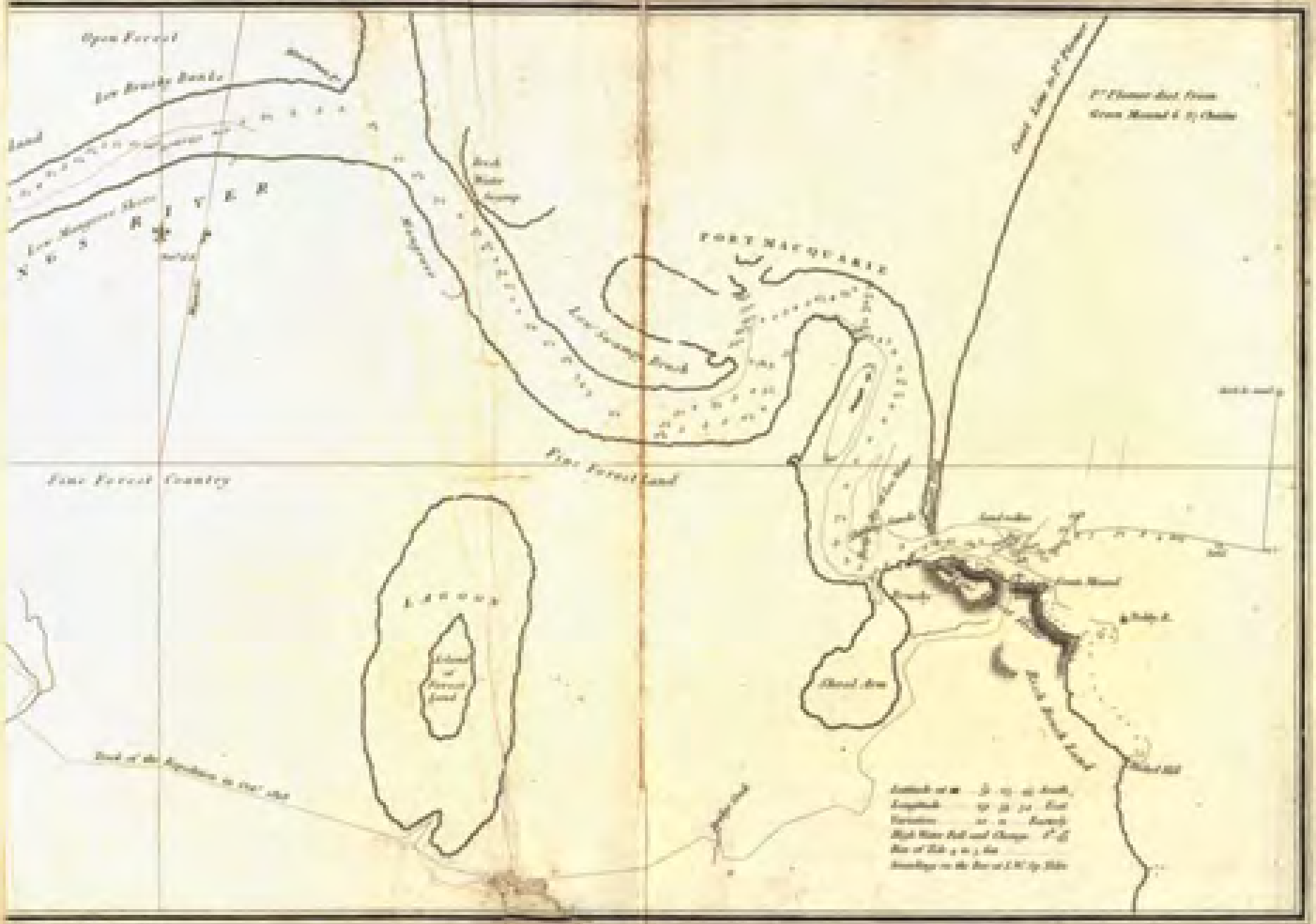
any encouragement from us to advance, after halting a few minutes, they returned with all speed along the beach to their companions. I had determined if they had approached nearer to have made an example of them: and for the future, never to suffer them to come near us at all. I was very much surprised to find that Blackhead proved to be an island, with a good passage, at least a mile and a half wide, between it and the main. There appears excellent anchorage and shelter under it, and indeed it seems a far better and more convenient roadstead than Port Stephens, being safe from all winds, with a passage either from north or south. The relative positions of the points and islands on this part of the coast, by no means correspond with, nor does the longitude of Port Stephens agree with that assigned to Sugarloaf Point by Captain Flinders, who commenced at that point; Port Stephens, and this part of the coast, being laid down from other authorities. From this point, the north head of Port Stephens bore N. 199.; Sugarloaf Point N. 45. E.; and several other bearings were taken for a sketch of the channel between Blackhead Island, and the main.

November 1.—We departed early in the morning, and at three o'clock arrived at Port Stephens. The natives had assembled in considerable numbers at the back of the beach, and being armed, we suspected their intention to be, to throw at us from the bank and brush as we passed. On the advance of four men who were

sent to clear the bank of them, they quickly retired, and did not show themselves again until we had passed. They appeared to be as cowardly as treacherous: and I am convinced, that all the mischief they do, arises from a misplaced confidence in their seeming friendly dispositions. A single person off his guard is sure to fall a sacrifice to their thirst for plunder. As we were unable to pass this port without the assistance of a large boat, it was determined that Mr. Evans and three men should cross the port in our own boat and proceed to Newcastle, from which settlement we were distant about thirty-six miles; and procure such aid as the commandant could afford us, together with a supply of provisions, our own being nearly exhausted.

November 5.—Mr. Evans and party set forward at day-light on Monday morning, and arrived the same evening at Newcastle. The commandant, Captain Wallis of the 46th regiment, lost not a moment in despatching a large boat with an abundance of every comfort that could be acceptable to travellers in our situation. We had also the satisfaction to learn generally the welfare of our friends in Sydney.


A
PLAN
OF
PORT MACQUARIE.
including
a sketch of part of
(HASTINGS RIVER)
on the
EAST COAST
of
NEW SOUTH WALES.
Pine Forest Land
RANGE
Low and Swampy
Low and Rocky Rich Land
Low Rocky Rich Land
Pine open Forest Country
Pine Forest Country well timbered with Cedar and Timber of good quality
Rocky Rich Land
Open Forest Country well timbered with Gum
Swamp
Pine open Forest Country
Rich Land recently Timbered
Rocky Rich Land


Open Forest
Low Rocky Banks
Low Mangrove Shore
R I V E R
Pine Forest Country
Pine Forest Land
PORT MACQUARIE
Low Sandy Point
Low Sandy Beach
Entrance
Breakers
Point Hibbs
Lagoon
Road of the Macquarie in 7 fms
Fort Wharf
Store
Commandant's House
Officers' Barracks
Soldiers' Barracks
Hospital
Gaol
Female Factory
Church
Burial Ground
Road to Wauchope
Road to Port Macquarie
Road to Hastings
Road to Wauchope
Latitude of Mr. 31° 25' 30" South.
Longitude 152° 55' 30" East
Variation 10° 30' Easterly
High Water Full and Change 8h 45'
Rise of Tide 4 to 5 feet
Soundings on the Bar at L.W. 2½ Fathoms

APPENDIX.

APPENDIX.

PART I.

No. I.

By His Excellency, Lachlan Macquarie, Esq., Captain General, and Governor in Chief of the Territory of New South Wales, and its dependencies, &c. &c.

Instructions for John Oxley, Esq., Surveyor General of Lands.

Sir,

The Right Honourable Earl Bathurst, His Majesty's principal Secretary of State for the Colonies, having in a recent despatch authorised and directed me to select and employ a properly qualified and competent officer belonging to this government, for conducting and leading an expedition for the purpose of prosecuting the discoveries made some time since to the westward of the Blue Mountains of New South Wales, by Mr. George William Evans, deputy surveyor of lands; and reposing especial trust and confidence in your abilities, zeal, and diligence, for conducting and leading such an expedition: I do hereby constitute and appoint you in virtue of the powers in me vested, to be chief of the expedition now fitting out to prosecute the discoveries to the westward of the Blue Mountains in the interior of the continent of Australia. You are accordingly to be obeyed and respected as chief of this expedition, and to be governed generally during the continuance of it, by the following instructions.

First.—With the view of facilitating the objects of the present expedition, and in justice to his former zealous and successful exertions in

making the original discoveries in the interior, to the westward of the Blue Mountains; the Right Honourable the Secretary of State has directed, that in the farther prosecution of these discoveries, Mr. George William Evans, deputy surveyor of lands, should be associated with the person appointed to head and direct the expedition; and to be considered the second in command of it. You are therefore to consider Mr. Evans as next in command to yourself during the progress of the expedition, and to consult with him on all operations and points connected therewith; it being presumed from his local experience in the interior, he will be able to afford you very useful information and assistance.

Second.—Exclusive of yourself and Mr. Evans, I have deemed it advisable to permit Mr. Allan Cunningham, one of the King's botanists, (lately sent out to this country, for the purpose of collecting plants and seeds for His Majesty's gardens at Kew), to accompany the expedition. I have also ordered ten other persons to accompany you on the expedition in the various capacities of assistants, or servants; and herewith you will receive a schedule of their names, and respective designations, or employments.

Third.—In order to give every facility to the objects of the expedition now fitting out, and to afford you the means of prolonging your absence from head-quarters, and consequently extending the range of your discoveries, I have deemed it advisable to furnish yourself and party with a sufficient supply of good wholesome provisions for five months; in which space of time, it is concluded, you will be able to ascertain all the important objects of the expedition. And in order that this five months supply of provisions may remain untouched, until you shall have taken your final departure from the last discovered point on the Lachlan River, I have had a depot lately established there for the purpose of lodging the five months provisions, till your arrival at that point; the necessary number of bât horses having been provided for conveying the provisions thither; and it has been lately reported to me, that almost the whole of the five months provisions have already been conveyed to the depot on the Lachlan River, and that the remaining part thereof will be deposited there in the course of seven days from this date. You will herewith receive a schedule, or

account of the provisions, together with a list of the bât horses, and other various equipments furnished and sent to the depot on the banks of the Lachlan River, for the use of the expedition. I hope it is unnecessary for me to point out or recommend to a person of your experience, the absolute necessity of observing every possible economy in the expenditure of your provisions, and preventing every possible waste thereof, so as to make them hold out for the full space of time they are intended to last. There is an ample and liberal daily ration of provisions allowed and sent for each person sufficient for five months; and you must make it your particular business to see that there shall be no waste or loss in the issuing, or carriage of your stock of provisions.

Fourth.—Having been informed, first from the reports of Mr. Evans, the original discoverer of the Lachlan River, and subsequently from those of William Cox, Esq., who went thither lately at my particular request, that there was every reason from its appearance to conclude that that river would be found to be navigable for small boats; I some time since sent a boat-builder for the purpose of constructing two light boats for navigating this river, and conveying the provisions and stores for the expedition along it, to its junction with the sea, in case it should be found to fall into it, which there is every reason to hope it does. In the event of this hope being realized, it will greatly facilitate the objects of the expedition to be able thus to transport all your provisions, and other equipments, by water, instead of the tedious process of carrying them by land on the backs of horses, through a woody and intricate country.

Fifth.—The three grand and principal objects of the present expedition are:—First, to ascertain the real course or general direction of the Lachlan River, and its final termination, and whether it falls into the sea, or into some inland lake. Secondly, if the river falls into the sea, to ascertain the exact place of its embouchure, and whether such place would answer as a safe and good port for shipping: and thirdly, the general face of the country, nature of the soil, woods, and animal and natural productions of the country through which this river passes; carefully examining and noting down each of these particulars, and adding thereto the nature of the climate, and description of such natives or aborigines of

the country as you may happen to see, or fall in with in your progress through it.

For your farther information and guidance, you will receive herewith a paper marked A, which is a copy of one lately received by me from Earl Bathurst, His Majesty's principal Secretary of State for the colonies, and which I am directed by his lordship to make the groundwork of my instructions to the officer whom I might think proper to select for, and entrust with the due execution of the services therein required. And I therefore refer you for all farther instructions to the paper thus alluded to; persuaded you will do every thing in your power to comply with and execute, as far as your means will allow, the several orders and directions therein contained; communicating these instructions to the several persons employed with you on the expedition, in as far as they are severally concerned in making the observations and collections pointed out in the said instructions from the Secretary of State.

Sixth.—It will of course be necessary in order to ascertain the exact distance and direction of your journies, whilst prosecuting your discoveries, that the country through which you travel shall be regularly chained and laid down upon a chart; but I leave it optional with yourself to do this either during your outward or homeward bound journey; and as it is expected that the Lachlan River will be found to empty itself into that part of the sea on the south-west coast of Australia, between Spencer's Gulf and Cape Otway, it is hoped you will be able to make all the necessary discoveries, and return again to Bathurst considerably within five months; as the greatest distance from thence to that part of the coast, where the river is supposed to fall into it, cannot exceed six hundred miles. It is also hoped and expected, that the Lachlan and Macquarie Rivers unite at some distant point from where Mr. Evans terminated his trace of the Lachlan River; and in case these two rivers are found to form a junction, the exact place of their confluence must be clearly and exactly ascertained in regard to latitude and longitude, and noted down accordingly. The latitude and longitude of the junction of both or either of these rivers with the sea, or inland lake, must also be accurately ascertained and marked down in the chart to be made of your entire tour and discoveries.

Seventh.—On your return from your journey to the sea-coast to Bathurst, you are to direct all the journals or other written documents belonging to, and curiosities collected by the several individuals composing the expedition, to be carefully sealed up with your own seal, and kept in that state until after you have made your report in writing to me at Sydney, of the result of the expedition.

Eighth.—I have only to add, that I wish you to set out from Sydney on the present service, on Monday, the 31st of this present month, so as to arrive at Bathurst, on or before the 8th of the ensuing month.

On your arrival at Bathurst, you will find William Cox, Esq., there, and to him I beg leave to refer you for every information relative to the provisions, stores, horses for carriage, and other equipments ordered to be forwarded to the depot on the Lachlan River, for the use of the expedition; the arrangement and conveyance of all which has been wholly entrusted to him. Mr. Cox having promised to accompany you as far as the depot on the Lachlan River, he will be able to remove any unforeseen difficulties that may arise on your arrival there, in getting the provisions and stores for the use of the expedition forwarded.

Wishing every success may attend the expedition under your command, and a safe return to all the individuals composing it;

I remain, Sir,

Your most obedient servant,

(Signed,) L. MACQUARIE,

Governor in chief of New South Wales.

Government House, Sydney,
March 24, 1817.

A.

Copy of Instructions from the Right Honourable the Secretary of State.

Downing Street, April 18, 1816.

It is most desirable that any person travelling into the interior should keep a detailed Journal of his proceedings. In this Journal all observations and occurrences of every kind, with all their circumstances, however minute, and however familiar they may have been rendered by custom, should be carefully noted down; and it is also desirable that he should be as circumstantial as possible in describing the general appearance of the country, its surface, soil, animals, vegetables and minerals, every thing that relates to the population, the peculiar manners, customs, language, &c., of the individual natives, or the tribes of them that he may meet with.

The following however will be among the most important subjects, on which it will be more immediately the province of a traveller to endeavour to obtain information.

The general nature of the climate, as to the heat, cold, moisture, winds, rains, &c.; the temperature regularly registered from Fahrenheit's thermometer, as observed at two or three periods of the day.

The direction of the mountains; their general appearance as to shape, whether detached, or continuous in ranges.

The rivers, and their several branches, their direction, velocity, breadth and depth.

The animals, whether birds, beasts, or fishes, reptiles, insects, &c., distinguishing those animals, if any, which appear to have been domesticated by the natives.

The vegetables, and particularly those that are applicable to any useful purpose, whether in medicine, dyeing, &c.; any scented woods, or such as may be adapted for cabinet work, or furniture, and more particularly such woods as may appear to be useful in ship-building; of all

which it would be desirable to procure small specimens, labelled and numbered, so that an easy reference may be made to them in the Journal, to ascertain the quantities in which they are found, and the situations in which they grow.

Minerals, any of the precious metals, or stones, if used or valued by the natives.

With respect to the animals, vegetables, and minerals, it is desirable that specimens of the most remarkable should be preserved as far as the means of the traveller will admit, and especially the seeds of any plants not hitherto known: when the preservation of specimens is impossible, drawings or detailed accounts of them are most desirable.

The description, and characteristic difference, of the several people whom he may meet; the extent of the population, their occupation, and means of subsistence; whether chiefly, or to what extent, by fishing, hunting, or agriculture, and the principal objects of their several pursuits.

A circumstantial account of such articles, if any, as might be advantageously imported into Great Britain.

A vocabulary of the language spoken by the natives whom he may meet, using in the compilation of each the same English words.

If the people are sufficiently numerous to form tribes, it is important to ascertain their condition, and rules of the society; their genius and disposition; the nature of their amusements; their diseases and remedies, &c.; their objects of worship, religious ceremonies; and the influence of those ceremonies on their moral character and conduct.

(Signed) JOHN THOMAS CAMPBELL, Sec.

(True copy.)

No. I.

List of the names and designations of the several persons proceeding on the expedition of discovery, under the command of John Oxley, Esq., Surveyor General of Lands.

1 John Oxley, Esq., chief of the expedition.
2 Mr. George William Evans, second in command.
3 Mr. Allan Cunningham, King's botanist.
4 Charles Fraser, colonial botanist.
5 William Parr, mineralogist.
6 George Hubbard, boat-builder.
7 James King, 1st boatman, and sailor.
8 James King, 2d horse-shoer.
9 William Meggs, butcher.
10 Patrick Byrne, guide and horse leader.
11 William Blake, harness-mender.
12 George Simpson, for chaining with surveyors.
13 William Warner, servant to Mr. Oxley.

(Signed,) L. MACQUARIE.

Sydney,
March 24, 1817.

No. II.

Government House, Sydney,
June 10, 1815.

Mr. Cox having reported the road as completed on the 21st of January, the governor, accompanied by Mr. Macquarie, and that gentleman, commenced his tour on the 25th of April last, over the Blue Mountains, and was joined by Sir John Jamison, at the Nepean, who accompanied him during the entire tour. The following gentlemen composed the governor's suite: Mr. Campbell, secretary; Captain Antill, major of brigade; Lieutenant Watts, aid-de-camp; Mr. Redfern, assistant surgeon; Mr. Oxley, surveyor general; Mr. Meehan, deputy surveyor general; Mr. Lewin, painter, and naturalist; and Mr. G. W. Evans, deputy surveyor of lands, who had been sent forward for the purpose of making farther discoveries, and rejoined the party on the day of arrival at Bathurst Plains.

The commencement of the ascent from Emu Plains, to the first depot, and then to a resting-place, now called Spring Wood, distant twelve miles from Emu Ford, was through a very handsome forest of lofty trees, and much more practicable and easy than was expected. The facility of the ascent for this distance excited surprise, and is certainly not well calculated to give the traveller a just idea of the difficulties he has afterwards to encounter.

At a farther distance of four miles, a sudden change is perceived in the appearance of the timber, and the quality of the soil; the former becoming stunted, and the latter barren and rocky. At this place the fatigues of the journey may be said to commence; here the country became altogether mountainous, and extremely rugged. Near to the eighteenth mile mark (it is to be observed the measure commences from Emu Ford), a pile of stones attracted attention; it is close to the line of road, on the top of a rugged and abrupt ascent, and is supposed to have been placed by Mr. Caley, as the extreme limit of his tour; hence the governor gave that part of the mountain the name of Caley's Repulse. To

have penetrated even so far, was an effort of no small difficulty. From hence forward to the twenty-sixth mile is a succession of steep and rugged hills, some of which are almost so abrupt as to deny a passage altogether; but at this place a considerably extensive plain is arrived at, which constitutes the summit of the western mountains, and from thence a most extensive and beautiful prospect presents itself on all sides to the eye. The town of Windsor, the River Hawkesbury, Prospect Hill, and other objects within that part of the colony now inhabited, of equal interest, are distinctly seen from hence. The majestic grandeur of the situation, combined with the various objects to be seen from this place, induced the governor to give it the appellation of the King's Table Land. On the south-west side of the King's Table Land, the mountain terminates in abrupt precipices of immense depth; at the bottom of which is seen a glen, as romantically beautiful as can be imagined, bounded on the farther side by mountains of great magnitude, terminating equally abruptly as the others; and the whole thickly covered with timber. The length of this picturesque and remarkable tract of country is about twenty-four miles, to which the governor gave the name of the Prince Regent's Glen. Proceeding hence to the thirty-third mile, on the top of a hill an opening presents itself on the south-west side of the Prince Regent's Glen, from whence a view obtained particularly beautiful and grand: mountains rising beyond mountains, with stupendous masses of rock in the fore ground, here strike the eye with admiration and astonishment. The circular form in which the whole is so wonderfully disposed, induced the governor to give the name of Pitt's Amphitheatre to this offset or branch from the Prince Regent's Glen. The road continues from hence for the space of seventeen miles, on the ridge of the mountain which forms one side of the Prince Regent's Glen, and there it suddenly terminates in nearly a perpendicular precipice of six hundred and seventy-six feet high, as ascertained by measurement. The road constructed by Mr. Cox down this rugged and tremendous descent, through all its windings, is no less than three fourths of a mile in length, and has been executed with such skill and dexterity as reflects much credit to him: the labour here undergone, and the difficulties surmounted, can only be appreciated by those who view this scene. In

order to perpetuate the memory of Mr. Cox's services, the governor deemed it a tribute justly due to him to give his name to this grand and extraordinary pass, and he accordingly called it Cox's Pass.—Having descended into the valley at the bottom of this pass, the retrospective view of the overhanging mountain is magnificently grand.

Although the present pass is the only practicable point yet discovered for descending by, yet the mountain is much higher than those on either side of it, from whence it is distinguished at a considerable distance: when approaching it from the interior, and in this point of view, it has the appearance of a very high distinct hill, although it is in fact only the abrupt termination of a ridge. The governor gave the name of Mount York to this termination of the ridge: on descending Cox's Pass, the governor was much pleased by the appearance of good pasture land, and soil fit for cultivation, which was the first he had met with since the commencement of his tour. The valley at the base of Mount York he called the Vale of Clwyd, in consequence of the strong resemblance it bore to the vale of that name in North Wales: the grass in this vale is of a good quality, and very abundant; and a rivulet of fine water runs along it from the eastward, which unites itself at the western extremity of the vale with another rivulet, containing still more water. The junction of these two streams forms a very fine river, now called by the governor Cox's River; which takes its course, as has since been reascertained, through the Prince Regent's Glen, and empties itself into the River Nepean; and it is conjectured from the nature of the country through which it passes, that it must be one of the principal causes of the floods which have been occasionally felt on the low banks of the River Hawkesbury, into which the Nepean discharges itself. The Vale of Clwyd from the base of Mount York, extends six miles in a westerly direction, and has its termination at Cox's River. Westward of this river the country again becomes hilly, but is generally open forest land, and very good pasturage. Three miles to the westward of the Vale of Clwyd, Messrs. Blaxland, Wentworth, and Lawson, had formerly terminated their excursion; and when the various difficulties are considered which they had to contend with, especially until they had effected the descent from Mount York, to which place they

were obliged to pass through a thick brushwood, where they were under the necessity of cutting a passage for their baggage horses, the severity of which labour had seriously affected their healths—their patient endurance of such fatigue cannot fail to excite much surprise and admiration. In commemoration of their merits, three beautiful high hills, joining each other at the end of their tour at this place, have received their names in the following order, viz., Mount Blaxland, Wentworth's Sugar Loaf, and Lawson's Sugar Loaf.

A range of very lofty hills and narrow valleys alternately form the tract from Cox's River, for a distance of sixteen miles, until the Fish River is arrived at; and the stage between these rivers is consequently very severe and oppressive to the cattle: to this range the governor gave the name of Clarence's Hilly Range. Proceeding from the Fish River and a short distance from it, a very singular and beautiful mountain attracts the attention, its summit being crowned with a large and very extraordinary looking rock, nearly circular in form, which gives to the whole very much the appearance of a Hill Fort, such as are frequent in India; to this lofty hill, Mr. Evans, who was the first European discoverer, gave the name of Mount Evans. Passing on from hence the country continues hilly, but affords good pasturage; gradually improving to Sidmouth Valley, which is distant from the pass of the Fish River eight miles. The land here is level, and the first met with unencumbered with timber: it is not of very considerable extent, but abounds with a great variety of herbs and plants, such as would probably highly interest and gratify the scientific botanist. This beautiful little valley runs north-west and south-east, between hills of easy ascent thinly covered with timber. Leaving Sidmouth Valley the country again becomes hilly, and in other respects resembles very much the country to the eastward of the valley for some miles.

Having reached Campbell River, distant thirteen miles from Sidmouth Valley, the governor was highly gratified by the appearance of the country, which there began to exhibit an open and extensive view of gently rising grounds and fertile plains. Judging from the height of the banks and its general width, the Campbell River must be on some occasions of very considerable magnitude; but the extraordinary drought which has ap-

parently prevailed on the western side of the mountains, equally as throughout this colony for the last three years, has reduced this river so much, that it may be more properly called a chain of pools than a running stream at the present time. In the reaches, or pools of the Campbell River, the very curious animal called the water mole (ornithorhynchus paradoxus), is seen in great numbers. The soil on both banks is uncommonly rich, and the grass is consequently luxuriant. Two miles to the southward of the line of road which crosses the Campbell River, there is a very fine rich tract of low lands which has been named Mitchel Plains.

Wild flax was found here growing in considerable quantities. The Fish River, which forms a junction with the Campbell River a few miles to the northward of the road and bridge over the latter, has also two very fertile plains on its banks, the one called O'Connell Plains, and the other Macquarie Plains, both of considerable extent, and very capable of yielding all the necessaries of life. At the distance of seven miles from the bridge over the Campbell River, Bathurst Plains open to the view, presenting a rich tract of champaign country of eleven miles in length, bounded on both sides by gently rising and very beautiful hills, thinly wooded. The Macquarie River, which is constituted by the junction of the Fish and Campbell Rivers, takes a winding course through the plains, and can be easily traced from the high lands adjoining, by the particular verdure of the trees on its banks, which are likewise the only trees throughout the extent of the plains.

The level and clean surface of these plains gives them at first view very much the appearance of lands in a state of cultivation.

The governor and his suite arrived at these plains on Thursday, the 4th of May, and encamped on the southern or left bank of the Macquarie River; the situation being selected in consequence of its commanding a beautiful and extensive prospect for many miles in every direction around it. At this place the governor remained for a week, which time he occupied in making excursions in different directions through the adjoining country, on both sides of the river.

On Sunday, the 7th of May, the governor fixed on a site suitable for the erection of a town at some future period, to which he gave the name of

Bathurst, in honour of the present Secretary of State for the colonies. The situation of Bathurst is elevated sufficiently beyond the reach of any floods which may occur, and is at the same time so near the river on its south bank, as to derive all the advantages of its clear and beautiful stream. The mechanics, and settlers of whatever description, who may be hereafter permitted to form permanent residences to themselves at this place, will have the highly important advantages of a rich and fertile soil, with a beautiful river flowing through it, for all the uses of man.

The governor must however add, that the hopes which were once so sanguinely entertained of this river becoming navigable to the western sea have ended in disappointment. During the week that the governor remained at Bathurst, he made daily excursions in various directions: one of these extended twenty-two miles in a south-west direction, and on that occasion as well as on all the others, he found the country composed chiefly of valleys and plains, separated occasionally by ranges of low hills; the soil throughout being generally fertile, and well circumstanced for the purpose of agriculture, or grazing.

Within a distance of ten miles from the site of Bathurst, there is not less than fifty thousand acres of land clear of timber, and fully one half of that may be considered excellent soil, well calculated for cultivation. It is a matter of regret, that in proportion as the land improves the timber degenerates; and it is to be remarked, that every where to the westward of the mountains it is much inferior, both in size and quality, to that within the present colony: there is however a sufficiency of timber of tolerable quality within the district around Bathurst, for the purposes of house building, and husbandry.

The governor has here to lament, that neither coals nor limestone have been yet discovered in the western country; articles in themselves of so much importance, that the want of them must be severely felt, whenever that country shall be settled.

Having enumerated the principal and most important features of this new country, the governor has now to notice some of its live productions. All around Bathurst abounds in a variety of game; and the two principal rivers contain a great quantity of fish, but all of one denomination,

resembling the perch in appearance, and of a delicate and fine flavour, not unlike that of a rock cod; this fish grows to a large size, and is very voracious. Several of them were caught during the governor's stay at Bathurst, and at the halting-place on the Fish River. One of those caught weighed seventeen pounds, and the people stationed at Bathurst reported they had caught some weighing twenty-five pounds. The field game are the kangaroos, emus, black swans, wild geese, wild turkeys, bustards, ducks of various kinds, quail, bronze-winged and other pigeons, &c. &c. The water-mole also abounds in all the rivers and ponds.

The site designed for the town of Bathurst by observation taken at the flag-staff, which was erected on the day of Bathurst receiving that name, is situated in latitude 33. 24. 30. S., and in longitude 149. 29. 30. E. of Greenwich; being also twenty-seven miles and a half north of Government House, in Sydney, and ninety-four and a half west of it, bearing west 18. 20. N., eighty-three geographical miles, or ninety-five and a half statute miles; the measured road distance from Sydney to Bathurst being one hundred and forty English miles.

The road constructed by Mr. Cox, and the party under him, commences at Emu Ford, on the left bank of the Nepean, and is thence one hundred and one miles and a half to the flag-staff at Bathurst: this road has been carefully measured, and each mile regularly marked on the trees growing on the left side of the road, proceeding towards Bathurst.

The governor in his tour made the following stages, in which he was principally regulated by the consideration of his having good pasturage for the cattle and plenty of water:

1st stage, Spring Wood, distant from Emu Ford, 12 miles.
2nd ditto, Jamison's Valley, or 2d depot, distant from ditto, 28 miles.
3rd ditto, Blackheath, distant from ditto, 41 miles.
4th ditto, Cox's River, distant from ditto, 56 miles.
5th ditto, The Fish River, distant from ditto, 72 miles.
6th ditto, Sidmouth Valley, distant from ditto, 80 miles.
7th ditto, Campbell River, distant from ditto, 90 miles.
8th ditto, Bathurst, distant from ditto, 101½ miles.

At all of which places the traveller may assure himself of good grass, and water in abundance.

No. III.

Bathurst, August 30, 1817.

"Sir,

"I HAVE the honour to acquaint your excellency with my arrival at this place last evening, together with the persons comprising the expedition to the westward, which your excellency was pleased to place under my direction.

"Your excellency is already informed of *my* proceedings up to the 30th of April. The limits of a letter will not permit me to enter at large into the occurrences of nineteen weeks; and as I shall have the honour of waiting on your excellency in a few days, I trust you will in the mean time have the goodness to accept the summary account which I now offer.

"I proceeded down the Lachlan in company with the boats until the 12th of May, the country rapidly descending, until the waters of the river rising to a level with it, and dividing themselves into numerous branches, inundated the land to the west and north-west, and prevented any farther progress in that direction, the river itself being lost among the marshes. Up to this point, it had received no accession of waters from either side; but on the contrary, was constantly dissipating itself in lagoons and swamps.

"The impossibility of proceeding farther in conjunction with the boats being evident, I determined upon mature deliberation to haul them up; and divesting ourselves of every thing that could possibly be spared, proceed with the horses loaded with the additional provisions from the boats, on such a course towards the coast as would intersect any stream that might arise from the divided waters of the Lachlan.

"In pursuance of this plan, I quitted the river on the 17th of May, taking a south-west course towards Cape Northumberland, as the best adapted to answer my intended purpose. I will not here detail the difficulties and privations we experienced in passing through a barren and desolate country, without any water but such rain as was found

remaining in holes and the crevices of rocks. I continued this course until the 9th of June, when having lost two horses through fatigue and want, and the others being in a deplorable condition, I changed our course to north, along a range of lofty hills running in that direction, as they afforded the only means of procuring water until we should fall in with some stream. On this course I continued until the 23d of June, when we again fell in with a stream, which we had at first some difficulty to recognise as the Lachlan, it being little larger than one of the branches of it where we quitted it on the 17th of May.

" I did not hesitate a moment to pursue the course of this stream, not that the nature of the country or its own appearance in any manner indicated that it would become navigable, or even permanent; but I was unwilling that the smallest doubt should remain whether any navigable waters fall westward into the sea, between the limits pointed out in my instructions.

" I continued along the banks of the stream until the 8th of July, it having taken during this period a westerly direction, and passed through a perfectly level country, barren in the extreme, and being evidently at periods entirely under water. To this point the river had been gradually diminishing, and spreading its waters over stagnated lagoons and morasses, without receiving any tributary stream that we knew of, during the whole extent of its course. The banks were not more than three feet high, and the marks of flood on the shrubs and bushes showed that at times it rose between two and three feet higher, causing the whole country to become a marsh, and altogether uninhabitable.

" Farther progress westward, had it been possible, was now useless, as there was neither hill nor rising ground of any kind within the compass of our view, which was bounded only by the horizon in every quarter, and entirely devoid of timber, unless a few diminutive gum trees on the very edge of the stream might be so termed. The water in the bed of the lagoon, as it might now be properly denominated, was stagnant, its breadth about twenty feet, and the heads of grass growing in it showed it to be about three feet deep.

" This unlooked for and truly singular termination of a river, which

we had anxiously hoped, and reasonably expected, would have led to a far different conclusion, filled us with the most painful sensations. We were full five hundred miles west of Sydney, and nearly in its latitude; and it had taken us ten weeks of unremitted exertion to proceed so far. The nearest part of the coast about Cape Bernoulli, had it been accessible, was distant above one hundred and eighty miles. We had demonstrated beyond a doubt, that no river could fall into the sea between Cape Otway and Spencer's Gulf, at least none deriving its waters from the eastern coast; and that the country south of the parallel of 34 degrees, and west of the meridian 147. 30. E. was uninhabitable, and useless for all the purposes of civilized men.

"It now became my duty to make our remaining resources as extensively useful to the colony as our circumstances would allow; these were much diminished: an accident which happened to one of the boats in the outset of the expedition had deprived us of one-third of our dry provisions, of which we had originally a supply for only eighteen weeks, and we had been consequently for some time living on a reduced ration of two quarts of flour per man, per week. To return to the depot by the route we had come would have been as useless as impossible; and, seriously considering the spirit of your excellency's instructions, I determined, after the most mature deliberation, to take such a route, on our return, as would I hoped comport with your excellency's views, had our then situation ever been contemplated.

"Returning up the Lachlan, I recommenced the survey of it from the point at which it was made on the 23d of June, intending to continue up its banks until its connexion with the marshes where we quitted it on the 17th of May was satisfactorily established, as also to ascertain if any streams might have escaped our research. The connexion with all the points of the survey previously determined, was completed between the 19th of July and the 3d of August. In the space passed over within that period, the river had divided itself into various branches, and formed three fine lakes, which, with one near the termination of our journey westward, were the only considerable pieces of water we had yet seen; and I now estimated that the river, from the place where it was first made

by Mr. Evans, had run a course, including all its windings, of upwards of one thousand two hundred miles; a length altogether unprecedented, when the single nature of the river is considered, and that its original source constitutes its only supply of water during that extent.

"Crossing at this point, it was my intention to take a north-east course to intersect the country, and if possible to ascertain what had become of the Macquarie River, which it was clear had never joined the Lachlan. This course led us through a country to the full as bad as any we had yet seen, and equally devoid of water, the personal want of which again much distressed us. On the 7th of August the scene began to change, and the country to assume a very different aspect; we were now quitting the neighbourhood of the Lachlan, and had passed to the north-east of the high range of hills, which on this parallel bounds the low country to the north of that river. To the north-west and north the country was high and open, with good forest land; and on the 10th we had the satisfaction of falling in with the first stream running northerly. This renewed our hopes of soon falling in with the Macquarie, and we continued upon the same course, occasionally inclining to the eastward until the 19th, passing through a fine luxuriant country, well watered; crossing in that space of time nine streams, having a northerly course through rich valleys, the country in every direction being moderately high and open, and generally as fine as can be imagined.

"No doubt remained upon our minds that those streams fell into the Macquarie, and to view it before it received such an accession, was our first wish. On the 19th, we were gratified by falling in with a river running through a most beautiful country, and which I should have been well contented to have believed to be the river we were in search of. Accident led us down this stream about a mile, when we were surprised by its junction with a river coming from the south, of such width and magnitude as to dispel all doubts as to this last being the river we had so long anxiously looked for. Limited as our resources were, we could not resist the temptation which this beautiful country offered us, to remain two days upon the junction of these rivers, for the purpose of examining its vicinity to as great an extent as possible.

"Our examination increased the satisfaction we had previously felt; as far as the eye could reach, in every direction, a rich and picturesque country extended, abounding in limestone, slate, good timber, and every other requisite which could render an uncultivated country desirable.

"The soil cannot be excelled; whilst a noble river of the first magnitude affords the means of conveying its productions from one part of the country to the other. Where we quitted it, its course was northerly, and we were then north of the parallel of Port Stephens, being in latitude 32. 32. 45. S., and 148. 52. E. longitude.

"It appeared to me that the Macquarie had taken a north-north-west course from Bathurst, and that it must have received immense accessions of water in its course from that place. We viewed it at a period best calculated to form an accurate judgment of its importance, when it was neither swelled by floods beyond its natural and usual height, nor contracted within its proper limits by summer droughts; of its magnitude when it should have received the streams we had crossed, independently of any which it may receive from the east (which, from the boldness and height of the country, I presume must be at least as many as from the south), some idea may be formed when I inform your excellency, that at this point it exceeded in breadth and apparent depth the Hawkesbury at Windsor, and that many of the reaches were of grander and more extended proportion than the admired one on the Nepean River, from the Warragamba to Emu Plains.

"Resolving to keep as near the river as possible during the remainder of our course to Bathurst, and endeavour to ascertain at least on the west side what waters fall into it, on the 22d we proceeded up the river, and, between the point quitted and Bathurst, crossed the sources of numberless streams all running into the Macquarie; two of them were nearly as large as that river itself is at Bathurst. The country whence all these streams derive their source was mountainous and irregular, and appeared equally so on the east side of the Macquarie.

"This description of country extended to the immediate vicinity of Bathurst, but to the west of those lofty ranges the land was broken into low grassy hills and fine valleys, watered by rivulets rising on the western

side of the mountains, which on their eastern side pour their waters directly into the Macquarie. These westerly streams appeared to me to join that which at first sight I had taken for the Macquarie, and, when united, to fall into it at the point on which it was first discovered on the 19th instant. We reached this place last evening, without a single accident having occurred to any one of the party during the whole progress of the expedition; which from this point has encircled within the parallels of 34. 30. S. and 32. S., and between the meridians of 149. 29. 30. E. and 143. 30. E. a space of nearly one thousand miles. I shall hasten to lay before your excellency the journals, charts, and drawings, explanatory of the various occurrences of our diversified route; amply gratified if our exertions should appear to your excellency commensurate with your expectations, and the ample means which your care and liberality placed at my disposal.

"I feel the most particular pleasure in informing your excellency of the obligations I am under to Mr. Evans, the deputy surveyor, for his able advice and cordial co-operation throughout the expedition; and, as far as his previous researches had extended, the accuracy and fidelity of his narrative was fully established.

"It would perhaps appear presumptuous in me to hazard an opinion upon the merits of persons engaged in a pursuit in which I have little knowledge; the extensive and valuable collection of plants found by Mr. A. Cunningham, the King's botanist, and Mr. C. Frazer, the colonial botanist, will best evince to your excellency the unwearied industry and zeal bestowed in the discovery and preservation of them; in every other respect they also merit the highest praise.

"From the nature of the greater part of the country passed over, our mineralogical collection is but small. Mr. S. Parr did as much as could be done in that branch, and throughout endeavoured to render himself as useful as possible.

"Of the men on whom the chief care of the horses and baggage devolved, it is impossible to speak in too high terms. Their conduct in periods of considerable privation, was such as must redound to their credit; and their orderly, regular, and obedient behaviour could not be

exceeded. It may principally be attributed to their care and attention, that we lost only three horses; and that, with the exception of the loss of the dry provisions already mentioned, no other accident happened during the course of the expedition. I most respectfully beg leave to recommend them to your excellency's favourable notice and consideration.

"I trust your excellency will have the goodness to correct any omissions or inaccuracies that may appear in this letter: the messenger setting out immediately will not allow me to revise or correct it.

"I have the honour to remain, with the greatest respect,

Your excellency's most obedient and humble servant,

(Signed), J. OXLEY, Surveyor General."

To His Excellency, Governor Macquarie, &c., &c., &c.

APPENDIX.

PART II.

No. IV.

Diary of Mr. Evans, Deputy Surveyor General, from the 8th, to the 18th of July 1818.

WEDNESDAY, July 8.—Left Mount Harris about nine o'clock. For six miles the country tolerably good; afterwards, to the end of my day's journey, it was alternately acacia pendula scrubs, and cypress brushes; the soil light, and full of holes; abundance of water, but, latterly, no grass. In the evening halted on the bank of a gully, having gone about twelve miles. Mount Harris bearing S. 35. W.

July 9.—Set forward at eight o'clock, and continued travelling until five in the afternoon, chiefly through very thick brushes, consisting of various shrubs, with casuarina and dwarf box trees; the country nearly a marsh and almost impassable, so much so, that I had great difficulty in keeping my course, being the greater part of the day up to our knees in water.

I estimate my distance this day to be about fifteen miles, on a north-east course.

July 10.—The country worse than yesterday, being exceeding low and marshy, with many thick scrubs. About eleven o'clock it opened, being more thinly clothed with the acacia pendula: having travelled about ten miles, we arrived on the borders of a large apparent plain, on which I had proceeded about two miles, when we were suddenly stopped by deep water among reeds; from hence I could distinctly see Arbuthnot's Range, the north end of which bore N. 101., and the other part connected by a low range bore from N. 108 to N. 112.

The country from north-west to north-east was open with the horizon, being covered with water and reeds, as far as the eye could distinguish: we saw immense numbers of wild ducks, many black swans, pelicans, and birds resembling the sea gannet: I altered my course to east, and shortly afterwards to south-east.

I estimate the distance travelled this day to be eighteen miles. Being rather late, we were much at a loss to find a place dry enough to sleep on: the north end of Arbuthnot's Range bore N. 98.

July 11.—Finding our efforts to travel in any direction north of east useless, I altered my course for the north end of Arbuthnot's Range. The country continuing nearly as yesterday, brushes and marshes alternately, having gone about twelve miles, the last quarter of a mile of which was an almost imperceptible rise above the general level, I came to the edge of a river, the stream of which was thirty or forty yards wide, but the bed nearly one hundred yards, the banks being eight or nine feet high: I forded it in the middle of a very long reach bearing north and south, the stream clear, and running gently from the south, about three feet deep, over a fine sandy bottom. After crossing this river, I proceeded onwards about four miles, and halted on the edge of a brush, having travelled sixteen or seventeen miles.

July 12.—After proceeding about four miles, we crossed a small stream from the south-east; the country perfectly level, not a perceptible rise in any direction, save Arbuthnot's Range: the space travelled over to-day was a complete marsh, the soil good, being clearly alluvial. It will be impossible for heavy loaded horses to walk over the country, traversed by us these last three days; the trouble we have had is more than can well be imagined. Travelled fifteen miles.

July 13.—A very cold morning, set off at sun-rise: at the sixth mile arrived on an open plain, over which was rather better travelling than we had latterly experienced. Finding it unlikely that we should reach the range, at least in time to view the country from it, I thought it best, as I had no time to spare, to keep more southerly for a lofty eminence about two miles distant, and apparently of easy ascent: this mount afforded me a most extensive prospect. The south extreme of Arbuthnot's Range

bore south, the north extreme N. 20. E., then trends more easterly. Westerly of the hill on which I stood and the range, the country is a perfect level, without the slightest apparent rise or inequality; what I could see of the country to the south-east, appeared to be very broken and rugged, detached rocks projecting like pillars and pyramids, in various parts of the ranges; there was a number of native fires about the base of the range, and we saw plenty of kangaroos, for the first time since quitting Mount Harris: I also this day shot a new species of pigeon. The distance travelled, I suppose sixteen or seventeen miles.

July 14.—Set forward on my return to the tents in a south-west direction, and passed, for four or five miles, through a good open forest country, abounding with kangaroos: after passing that, the country altered for the worse, becoming low and wet: at twelve miles, we crossed a chain of ponds leading to the north.

Last evening we suspected that we had been watched by the natives. I saw some of them, and our resting-place was surrounded by their smokes; they however did not attempt to molest us. Stopped in an acacia pendula brush, having travelled about twenty miles.

July 15.—It came on to rain in the night, and continued all this day. Our journey was dreadfully bad and marshy; yet on the whole the country had a better aspect, not being so much overrun with the plant called rhagodia as usual. On my track out, plains, brushes, indeed almost the entire surface was covered with it, until within a few miles of Arbuthnot's Range. After going about three miles, we again fell in with and forded the river crossed on the 11th instant: it was here not quite so wide as when first seen, but deeper. Halted, having gone about ten miles.

July 16.—I altered my course from south-west to west, 80 degrees south, and had an extremely tedious and unpleasant day's journey, through a wet and dreary country; continued rain. Travelled fifteen miles.

July 18.—Arrived at the hut about one o'clock, P. M., having travelled yesterday and to-day about thirty-seven miles.

(Signed) G. W. EVANS.

No. V.

GOVERNMENT, AND GENERAL ORDERS.

Government House, Parramatta,
December 5, 1818.

Civil Department.

The sanguine hope which his excellency the governor was induced to entertain, that, by pursuing the course of the Macquarie River, which had been discovered running in a north-west direction by John Oxley, Esq., on his return last year from tracing the course of the Lachlan to the south-west, would have amply compensated for the disappointment sustained on that occasion; and his excellency having in consequence accepted the farther services of Mr. Oxley, on a second expedition; the party consisting of John Oxley, Esq., surveyor general; John Harris, Esq., late surgeon of the 102d regiment, (who most liberally volunteered to accompany the expedition); Mr. Evans, deputy surveyor general; and Mr. Charles Fraser, colonial botanist; together with twelve men, having eighteen horses and two boats, and provisions for twenty-four weeks, took their final departure on the 4th of June last, from a depot prepared for the occasion in the Wellington Valley, at about ninety miles west of Bathurst; and those gentlemen, and the entire party, having a few days since arrived at Port Jackson by sea, from the northward, his excellency is happy in offering his most cordial congratulations to John Oxley, Esq., the conductor of this expedition, and to John Harris, Esq., Mr. Evans, and Mr. Fraser, on their safe return from this arduous undertaking.

The zeal, talent, and attention manifested by Mr. Oxley, considering the perils and privations to which he and his party were exposed, in exploring a tract of country so singularly circumstanced in its various bearings, are no less honourable to Mr. Oxley than conducive to the public interest; and although the principal object, namely, that of tracing the

Macquarie River to its embouchure, has not been so favourable as was anticipated, yet the failure is in a great degree counterbalanced by other important discoveries made in the course of this tour, which promise, at no very remote period, to prove of material advantage to this rising colony.

Whilst his excellency thus offers this public tribute of congratulations, he desires to accompany it with expressions of his high sense and approbation of Mr. Oxley's meritorious services on this occasion; which his excellency will not fail to represent to His Majesty's ministers, by the earliest opportunity.

The personal assistance and support so cheerfully and beneficially afforded to Mr. Oxley by the gentlemen associated with *him* on this expedition, demand his excellency's best acknowledgments, which he is happy thus publicly to request them to accept.

The following letter received from Mr. Oxley on his arrival at Port Stephens, on the 1st of November last, is now published for general information on the interesting subject of this tour.

By his excellency the governor's command,

J. T. CAMPBELL, Secretary.

Port Stephens, November 1, 1818.

Sir,

I HAVE the honour to inform your excellency, that I arrived at this port to-day, and circumstances rendering it necessary that Mr. Evans should proceed to Newcastle, I embrace the opportunity to make to your excellency a brief report of the route pursued by the western expedition entrusted to my direction.

My letter, dated the 22d of June last, will have made your excellency acquainted with the sanguine hopes I entertained, from the appearance of the river, that its termination would be either in interior waters, or coastwise. When I wrote that letter to your excellency, I certainly did not

anticipate the possibility, that a very few days farther travelling would lead us to its termination as an accessible river.

On the 28th of June, having traced its course without the smallest diminution or addition, about seventy miles farther to the north-north-west, there being a slight fresh in the river, it overflowed its banks, and although we were at the distance of near three miles from it, the country was so perfectly level that the waters soon spread over the ground on which we were. We had been for some days before travelling over such very low ground, that the people in the boats finding the country flooded, proceeded slowly; a circumstance which enabled me to send them directions to return to the station we had quitted in the morning, where the ground was a little more elevated. This spot being by no means secure, it was arranged that the horses, with the provisions, should return to the last high land we had quitted, a distance of sixteen miles; and as it appeared to me that the body of water in the river was too important to be much affected by the mere overflowing of its waters, I determined to take the large boat, and in her to endeavour to discover their point of discharge.

On the 2d of July I proceeded in the boat down the river, and in the course of the day went near thirty miles in a north-north-west course, for ten of which there had been, strictly speaking, no land, as the flood made the surrounding country a perfect sea: the banks of the river were heavily timbered, and many large spaces within our view, covered with the common reed, were also encircled by large trees. On the third, the main channel of the river was much contracted but very deep, the banks being under water from a foot to eighteen inches; the stream continued for about twenty miles on the same course as yesterday, when we lost sight of land and trees, the channel of the river winding through reeds, among which the water was about three feet deep, the current having the same direction as the river. It continued in this manner for near four miles more, when, without any previous change in the breadth, depth, and rapidity of the stream, and when I was sanguine in my expectations of soon entering the long-sought-for lake, it all at once eluded our farther pursuit, by spreading at all points from north-west to north-east over the plain of reeds which surrounded us; the river decreasing in depth from

upwards of twenty feet to less than five feet, and flowing over a bottom of tenacious blue mud; and the current still running with nearly the same rapidity, as when the water was confined within the banks of the river. This point of junction with interior waters, or where the Macquarie ceased to have the form of a river, is in lat. 30. 45. S., and long. 147. 10. E.

To assert positively that we were on the margin of the lake, or sea, into which this great body of water is discharged, might reasonably be deemed a conclusion that has nothing but conjecture for its basis; but if an opinion may be hazarded from actual appearances, which our subsequent route tended more strongly to confirm, I feel confident we were in the immediate vicinity of an inland sea, most probably a shoal one, and gradually decreasing, or being filled up by the immense depositions from the waters flowing into it from the higher lands, which, on this singular continent, seem not to extend beyond a few hundred miles from the sea-coast; as westward of these bounding ranges, (which from the observations I have been enabled to make, appear to me to run parallel to the direction of the coast), there is not a single hill or other eminence discoverable on this apparently boundless space, those isolated points excepted, on which we remained until the 28th of July; the rocks, and stones composing which, are a distinct species from those found on the above ranges.

I trust your excellency will believe, that fully impressed with the great importance of the question, as to the interior formation of this great country, I was anxiously solicitous to remove all ground for farther conjecture, by the most careful observations on the nature of the country; which though it was to me a proof that the interior was covered with water, yet I felt it my duty to leave no measure untried which would in any way tend to a direct elucidation of the fact.

It was physically impracticable to gain the edge of these waters by making a detour round the flooded portion of the country on the south-west side of the river, as we proved it to be a barren wet marsh, overrun with a species of polygonum, and not offering a single dry spot to which our course might be directed; and that there was no probability of finding any in that direction, I had a certain knowledge from the observations made during the former expedition. To circle the flooded country to the

north-east yet remained to be tried; and when on the 7th of July I returned to the tents, which I found pitched on the high land before mentioned, and from whence we could see mountains at the distance of eighty miles to the eastward, the country between being a perfect level, Mr. Evans was sent forward to explore the country to the north-east, that being the point on which I purposed to set forward.

On the 18th of July Mr. Evans returned, having been prevented from continuing on a north-east course beyond two day's journey, by waters running north-easterly through high reeds, and which were most probably those of the Macquarie River; as during his absence it had swelled so considerably as entirely to surround us, coming within a few yards of the tent. Mr. Evans afterwards proceeded more easterly, and, at a distance of fifty miles from the Macquarie River, crossed another much wider but not so deep, running to the north: advancing still more easterly, he went nearly to the base of the mountains seen from the tent, and returning by a more southerly route, found the country somewhat drier, but not in the least more elevated.

The discretionary instructions with which your excellency was pleased to furnish me, leaving me at liberty as to the course to be pursued by the expedition on its return to Port Jackson, I determined to attempt making the sea-coast on an easterly course, first proceeding along the base of the high range before mentioned, which I still indulged hopes might lead me to the margin of these, or any other interior waters which this portion of New South Wales might contain; and embracing a low line of coast on which many small openings remained unexamined, at the same time that the knowledge obtained of the country to be encircled, might materially tend to the advantage of the colony, in the event of any communication with the interior being discovered.

We quitted this station on the 30th of July, being in latitude 31. 18. S., and longitude 147. 31. E. on our route for the coast; and on the 8th of August arrived at the lofty range of mountains to which our course had been directed. From the highest point of this range we had the most extended prospect. From south by the west to north, it was one vast level, resembling the ocean in extent, but yet without water being discerned,

the range of high land extending to the north-east by north, elevated points of which were distinguished upwards of one hundred and twenty miles.

From this point, in conformity to the resolution I had made on quitting the Macquarie River, I pursued a north-east course; but after encountering numerous difficulties from the country being an entire marsh, interspersed with quicksands, until the 20th of August, and finding I was surrounded by bogs, I was reluctantly compelled to take a more easterly course, having practically proved that the country could not be traversed on any point deviating from the main range of hills which bound the interior; although partial dry portions of level alluvial land extend from their base westerly to a distance which I estimate to exceed one hundred and fifty miles, before it is gradually lost in the waters which I am clearly convinced cover the interior. The alteration in our course more easterly, soon brought us into a very different description of country, forming a remarkable contrast to that which had so long occupied us. Numerous fine streams, running northerly, watered a rich and beautiful country, through which we passed until the 7th of September, when we crossed the meridian of Sydney, as also the most elevated known land in New South Wales, being then in latitude 31. S. We were afterwards considerably embarrassed and impeded by very lofty mountains. On the 20th of September, we gained the summit of the most elevated mountain in this extensive range, and from it we were gratified with a view of the ocean, at a distance of fifty miles; the country beneath us being formed into an immense triangular valley, the base of which extended along the coast from the Three Brothers on the south, to the high land north of Smoky Cape. We had the farther gratification to find that we were near the source of a large stream running to the sea. On descending the mountain, we followed the course of this river, increased by many accessions, until the 8th of October, when we arrived on the beach near the entrance of the port which received it; having passed over, since the 18th of July, a tract of country near five hundred miles in extent from west to east.

This inlet is situated in lat. 31. 25. 45. S., and long. 152. 53. 54. E., and had been previously noticed by Captain Flinders, but from the

distance at which he was necessarily obliged to keep from the coast, he did not discover that it had a navigable entrance; of course our most anxious attention was directed to this important point; and although the want of a boat rendered the examination as to the depth of water in the channel incomplete, yet there appeared to be at low water at least three fathoms, with a safe though narrow entrance between the sand-rollers on either hand. Having ascertained thus far, and that by its means the fine country on the banks, and in the neighbourhood of the river, might be of future service to the colony, I took the liberty to name it Port Macquarie, in honour of your excellency, as the original promoter of the expedition.

On the 12th of October, we quitted Port Macquarie on our course for Sydney; and although no charts can be more accurate in their outline and principal points than those of Captain Flinders, we soon experienced how little the best marine charts can be depended upon, to show all the inlets and openings upon an extensive line of coast. The distance his ship was generally at, from that portion of the coast we had to travel over, did not allow him to perceive openings, which, though doubtless of little consequence to shipping, yet presented the most serious difficulties to travellers by land; and of which, if they had been laid down in the chart, I should have hesitated to have attempted the passage without assistance from the sea-ward: as it is, we are indebted for our preservation, and that of the horses, to the providential discovery of a small boat on the beach, which the men with the most cheerful alacrity carried upwards of ninety miles on their shoulders, thereby enabling us to overcome obstacles, otherwise insurmountable.

Until within these few days, I hoped to have had the satisfaction to report the return of the expedition without accident to any individual composing it; but such is the ferocious treachery of the natives along the coast to the northward, that our utmost circumspection could not save us from having one man (William Blake), severely wounded by them; but by the skilful care bestowed upon him by Dr. Harris, (who accompanied the expedition as a volunteer, and to whom upon this occasion, and throughout the whole course of it, we are indebted for much valuable assistance); I trust his recovery is no longer doubtful.

The general merits of Mr. Evans are so well known to your excellency, that it will here be sufficient to observe, that by his zealous attention to every point that could facilitate the progress of the expedition, he has endeavoured to deserve a continuance of your excellency's approbation.

Mr. Charles Fraser, the colonial botanist, has added many new species to the already extended catalogue of Australian plants, besides an extensive collection of seeds, &c.; and in the collection, and preservation, he has indefatigably endeavoured to obtain your excellency's approval of his services.

I confidently hope that the Journal of the expedition will amply evince to your excellency the exemplary and praiseworthy conduct of the men employed on it; and I feel the sincerest pleasure in earnestly soliciting for them your excellency's favourable consideration.

Respectfully hoping, that on a perusal and inspection of the journals and charts of the expedition, that the course I have pursued in the execution of your excellency's instructions will be honoured by your approbation,

I beg leave to subscribe myself, with the greatest respect,

Sir,

Your excellency's most obedient and humble servant,

(Signed), JOHN OXLEY, Surveyor General.

To His Excellency, Governor Macquarie, &c. &c. &c.

No. VI.

GOVERNMENT AND GENERAL ORDERS.

Government House, Sydney,
Thursday, June 17, 1819.

Civil Department.

It is with feelings of much gratification that his excellency The Governor is at length enabled to announce, thus publicly, that a safe capacious harbour has been discovered, and now accurately described, situated to the north-east of Newcastle; from whence it is distant about one hundred and forty miles, and consequently about two hundred and twenty miles in the same direction from Port Jackson.

This harbour, which was discovered by John Oxley, Esq., surveyor general, on his reaching the coast last year from his tour of discovery in the interior, then obtained from him the name of Port Macquarie; and although, owing to his not having any boat or vessel at that time, he could not then ascertain the soundings, and practicability of the entrance into this harbour, yet the general appearances were sufficiently favourable to induce him to form the opinion that it would prove safe; and from the circumstances of the surrounding country being well watered, and fertile, and the large River Hastings discharging itself into the sea there, he concluded that a port so happily situated would be a valuable acquisition to this colony. Impressed with this idea, he did not fail to report his opinion in regard to it to his excellency, who was happy to provide Mr. Oxley with a suitable vessel, to enable him to make the necessary survey of the entrance and harbour of Port Macquarie.

The result of this survey having been as satisfactory as could have been expected, his excellency is pleased to give publicity to Mr. Oxley's own clear and circumstantial report on this valuable acquisition; and his excellency desires to express his full and entire approbation of Mr. Oxley's

intelligent, zealous, and indefatigable exertions on this arduous occasion, which evince an earnest and well directed desire to promote the public service, and to advance the interests of the colony.

His excellency is also happy to add the expression of his approbation of the liberal and judicious assistance rendered to Mr. Oxley, by Lieutenant King, commander of His Majesty's colonial cutter, Mermaid, whose exertions are so justly appreciated by Mr. Oxley, in the following report; and his excellency desires both those gentlemen to accept his thanks for the service thus rendered by their joint efforts to the colony.

By his excellency's command,

J. T. CAMPBELL, Secretary.

Sydney, June 12, 1819.

Sir,

In obedience to your excellency's commands to proceed in the Lady Nelson, for the purpose of examining the entrance into Port Macquarie, and how far it would be practicable and safe for vessels of a certain description to enter it,

I beg leave to report to your excellency, that I arrived off the entrance of the harbour, on the 11th of May, in company with His Majesty's cutter, Mermaid, commanded by Lieutenant King, who expressed his intention to forward, by the superior means possessed by his vessel, the view of your excellency, relative to the harbour.

Both vessels anchored off the bar, and the day was spent in sounding the bar and channel; when we had the pleasure to find that we could enter with safety. Accordingly the next morning they were warped into the harbour, and moored alongside a natural wharf, on the south side of the port.

The examination of the harbour, and river falling therein, occupied us until the 21st, when having completed the service directed by your

excellency, both vessels quitted the port with perfect ease; the Mermaid pursuing her course to the northward on her ulterior destination.

Port Macquarie is situated in latitude 31. 25. 45. S., and in longitude 152. 53. 54. E. It is a bar harbour, on which however there is at low water spring tides, at least nine feet; the tide rising from three to four feet. The true channel is perfectly straight, and the tides set so, that no danger is to be apprehended from their operation. The chief danger to be avoided on entering is a sunken rock on the south side, having about three feet on it at low water; and it will be necessary, should the port be settled, that this danger should be buoyed. The bar extends about two hundred yards; the bottom a soft sand when the water deepens to two fathoms and a half, and alternately to three fathoms, when secure anchorage will be found inside the Beacon Rock.

When vessels arrive off the bar, should the wind or tide be adverse to entering the port, good anchorage will be found in from five to eight fathoms outside the bar; Tacking Point being shut in by Peaked Hill Point. When the winds are from the south, round by the west to north, the bottom a clear sand.

The winds from north-east and south-east, if blowing strong, cause the water to break across: but as those winds are fair for entering, no danger is to be apprehended to vessels whose draft of water does not exceed nine or ten feet. Should however circumstances render it imprudent or impracticable to enter, the coast may be cleared on either tack, the indenture of the coast line not being such as to cause it ever to be a dangerous lee shore.

The port should be entered at or near high water, when, unless it blows very hard, it seldom breaks on the bar. The tide of ebb runs with great rapidity, sometimes nearly four miles per hour, owing to the great quantity of fresh water in the Hastings River, and the narrowness of the channel. The flood tide seldom exceeds one mile and three quarters per hour. The tides are however very irregular in their operation, being considerably influenced by local circumstances. The port is perfectly capable to receive vessels of the class usually employed on the coasts of this territory, and is in my opinion far better and safer than many considerable

bar harbours in Europe; and which are much frequented by vessels adapted to their navigation.

Within the port the water deepens to five and six fathoms, which depth continues for nearly ten miles, when the rapids of the river render it impracticable for craft drawing more than six or eight feet; which depth continues for six or eight miles farther, when the falls commence; it may however, when the river is ordinarily full, be navigable for boats some little distance farther.

My report to your excellency of the proceedings of the expedition of discovery on its return in October, 1818, will have put your excellency in possession of the nature and description of country watered by the River Hastings from its source until it falls into the sea at Port Macquarie.

To that report I respectfully beg to refer your excellency, as my opportunities of examining the country, at that period, were of course so much more extensive. To the productions of the country as then reported, may now be added great quantities of rose wood, the flooded gum, and coal. *Flint* was before noticed lying in large masses on the beach. The coal, as appears to me, may be worked without difficulty, as I think that a stratum of it pervades the whole of the south side of the harbour, which stratum is again seen southerly as far as Camden Haven.

I herewith respectfully submit to your excellency a plan of the entrance into the port, with a sketch of part of Hastings River, for which I am principally indebted to the assistance rendered me on all occasions by Lieutenant King, who, I am happy in reporting to your excellency, fully coincides with me, as to the advantages that may be expected to result from the knowledge that the port has a navigable and safe entrance; thereby affording a communication with the fine country on both banks of Hastings River.

I have the honour to remain, with great respect,

Your excellency's most obedient and humble servant,

J. OXLEY, Surveyor General.

To His Excellency, Governor Macquarie, &c., &c., &c.

A Brief Abstract of the General Population of New South Wales, not including Van Diemen's Land, for the Years 1815, 1816, 1817, *inclusive.*

Date of Year.	Souls at					Total.
	Sydney.	Parramatta.	Windsor.	Liverpool.	Newcastle.	
1815 . . .	5068	2566	2749	1167	346	12,911
1816 . . .	6882	3581	3164	1550	413	15,175
1817 . . .	7409	4257	4257	1922	553	17,265

A Statement of the Land in Cultivation &c., Quantities of Stock, &c., in New South Wales, not including Van Diemen's Land, for the following five Years, viz. 1813, 1814, 1815, 1816, 1817, *inclusive.*

Date of Year.	Acres in									Horses.	Horned Cattle.	Sheep.	Hogs.
	Wheat.	Maize.	Barley.	Oats.	Peas and Beans.	Potatoes.	Garden and Orchard.	Cleared Ground.	Total held.				
1813 . . .	7386	13,814	694	299	66	398	960	52,976	151,057	1891	12,543	45,621	14,641
1814 . . .	8571	5880	537	355	33	205	906	61,679	181,787	2197	23,263	73,230	10,921
1815 . . .	10,712	6089	708	610	51	333	901	67,521	208,547	2328	25,279	62,476	10,106
1816 . . .	13,238	7540	836	787	68	380	1102	88,685	221,657	2451	21,116	55,097	11,372
1817 . . .	14,446	11,714	656	148	108	335	863	92,894	224,003	2851	33,637	66,684	15,634

A General Statement of the Inhabitants in New South Wales as per General Muster, taken by His Excellency Governor Macquarie, and Deputy Commissary General Allan, commencing the 18th of September, 1819, and finally closing the 21st of November, 1819, with an exact Account of the same at Van Diemen's Land.

| | Civil Department (exclusive of Military) | | |

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